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DETERMINISM  
AND FREEDOM  
IN STOIC  
PHILOSOPHY

*Susanne Bobzien*

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# Determinism and Freedom in Stoic Philosophy

SUSANNE BOBZIEN

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*Für Hannelore, Hans, Christine  
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## ABBREVIATIONS

<i>ANRW</i>	<i>Aufstieg und Niedergang der römischen Welt</i>
<i>CAG</i>	<i>Corpus Aristotelicum Graecum</i>
<i>CCSL</i>	<i>Corpus Christianorum, series Latina</i>
<i>CMG</i>	<i>Corpus Medicorum Graecorum</i>
<i>CSEL</i>	<i>Corpus Scriptorum Ecclesiasticorum Latinorum</i>
<i>DD</i>	H. Diels, <i>Doxographi Graeci</i>
<i>DL</i>	Diogenes Laertius
<i>EE</i>	<i>Ethica Eudemia</i>
<i>EN</i>	<i>Ethica Nicomachea</i>
<i>FDS</i>	K. Hülser, <i>Die Fragmente zur Dialektik der Stoiker</i>
<i>GCS</i>	<i>Die griechischen christlichen Schriftsteller der ersten Jahrhunderte</i>
<i>LSJ</i>	H. Liddell and R. Scott, rev. H. Stuart-Jones, <i>Greek-English Lexicon</i>
<i>OSAP</i>	<i>Oxford Studies in Ancient Philosophy</i>
<i>P</i>	L. Edelstein and I. G. Kidd, <i>Posidonius</i>
<i>PHP</i>	<i>De placitis Hippocratis et Platonis (Galen on the Doctrines of Hippocrates and Plato)</i>
<i>SE M</i>	Sextus Empiricus, <i>Adversus Mathematicos</i>
<i>PH</i>	id., <i>Πυρρώνειοι Ὑποτυπώσεις (Outlines of Pyrrhonism)</i>
<i>SVF</i>	H. von Arnim, <i>Stoicorum Veterum Fragmenta</i>

An asterisk (\*) behind a section number indicates that the content of the section is predominantly philological

## Introduction

The subject of this book is the Stoic theory of universal causal determinism: what it was; how the Stoics justified it; how they attempted to make it square with philosophically meaningful concepts of contingency, of purposeful action, of freedom and of moral responsibility; how the Stoics defended it against objections and criticism by other philosophers. In the course of following up these issues I also consider the Stoic views on the correlation of teleological and mechanical determinism, on the predictability of the future, on the role of empirical sciences, on the determination of character, and on the kind of freedom one gains by being moral; and the questions of how Stoic determinism is distinct from ancient theories of logical determinism, fatalism, and necessitarianism.

However, it would be misleading to describe my primary concern as *answering the question* of how the Stoics dealt with the problem of determinism and freedom. This may appear to be the obvious question to ask—especially so since the Stoics appear to stand at the beginning of the long tradition of compatibilist determinist positions. But the general emphasis in this book is different. The underlying primary question is: what were the *problems* the Stoics faced? what were *their* questions? and only then: what were their answers? For it becomes clear quickly that under the surface of superficial resemblance to modern discussions of the free-will problem (which sometimes is wrongly increased by the use of certain theory-laden terms in translations of the sources) a very different ontological framework lurks, and it is only within this framework that one can fully appreciate the intricate Stoic argumentation, and the ensuing ancient debates over their position.

It is these differences that should make the Stoic position interesting to philosophers today, rather than the many similarities. (What is the *philosophical* use of saying: ‘look, they already thought this back then’?) The controversy over determinism between the Stoics and their critics is of significance, since it helps us to see how a difference in philosophical basis and perspective leads to the rise of different philosophical problems.

But the Stoic position on determinism and freedom is also of major interest for our understanding of *Stoic* philosophy. Stoic philosophy is systematic philosophy; i.e. the Stoics conceived of all of their philosophical partial theories as fitting together and forming a consistent whole. As a result, Stoic philosophy is extremely complex. That makes it endlessly

fascinating, but also hard to understand. The topic of determinism and freedom lies at the very heart of Stoic philosophy in that it provides an essential link between its three basic parts: ethics, physics, and logic. The study of the Stoic position on determinism and freedom thus leads to a more profound understanding of the interconnection between these three areas, and of the foundations of Stoic philosophy as a whole.

Conversely, the fact that Stoic philosophy is systematic has consequences for any reconstruction or interpretation of their stand on the questions of determinism and freedom. For whatever their position, in principle it should fit in with the whole of Stoic philosophy. At least this is what we have to imagine the Stoics aiming at. For one's interpretation of a passage this means that it has not only to be consistent in itself, and with the other passages on the same topic, but it also has, in principle, to be in harmony with the whole of Stoic philosophy. Hence it is not unusual that for the understanding of one piece of theory or argument from, say, Stoic physics, one may need acquaintance with various elements of Stoic logic or ethics.

A proviso is appropriate here: Stoic philosophy, although uniform in its core tenets, has always contained—besides clearly dissident voices like Aristo's—differences in the explanations of details even among the most orthodox members of the school, and a focus on different areas of philosophy by different Stoics. The discussion of problems of determinism and freedom is in the main connected with the name of Chrysippus of Soli (c.280–207 BC), third in the line of scholarchs, a prolific writer and in antiquity by far the most famous of the Stoics. It is his theory and later developments thereof that dominate the following chapters.

Before I add some more specific remarks about structure, content, method, purpose, and limits of this book, a rough sketch of the philosophico-historical background in which the Stoic theory of determinism belongs is required, and the complex, difficult, situation of the sources needs to be addressed.

In antiquity problems of determinism and freedom were from the middle of the third century BC onwards collected and discussed under the heading 'on fate'. However the various topics discussed under this heading started out as independent problems arising in different areas of philosophy, for example in Plato's *Republic* 10 and *Timaeus*, Aristotle's *Nicomachean Ethics* 3.1–5; *De Interpretatione* 9, 14–15; *Metaphysics*  $\Delta$  2, *E* 3,  $\Theta$  3–4, *Physics* 2 and 8, in Epicurus' books *On Nature*, Zeno's and Chrysippus' books *On Nature*, and in the discussions of certain arguments with a sophistic appearance in the Megaric and Dialectic teachings (the Master Argument, the Mower Argument), which were recorded in books entitled *On the Possible* (Cicero, *Fat.* 1, Epictetus, *Diss.* 2.19).

We know of two authors before Chrysippus who wrote books *On Fate*: the fourth-century philosopher Xenocrates, a pupil of Plato and head of

the Academy 339–312 (DL 4.12), and Epicurus (DL 10.28 Philod, *Piet.* 1062–6 (Obbink)). Both works are lost, without so much as a line surviving, and certainly for Xenocrates we have no reason to assume that he dealt with the same conglomerate of topics as Chrysippus and later Stoics.<sup>1</sup> The founder of the Stoa, Zeno of Citium, integrated the concept of fate into his general physics, making fate one aspect of the active, all-determining principle, and thereby laying the foundation for the Stoic theory of fate. But there is no evidence of any awareness of the problems of determinism and freedom discussed later by Chrysippus in his two books on fate. Nor is it documented that Zeno—or any other Stoic before Chrysippus—wrote a work on fate. (Zeno's successor Cleanthes participated in the discussion of the Master Argument (Epictetus, *Diss.* 2.19).)

Chrysippus is the first author of works named *On Fate* where we know something about their content. We also know that Chrysippus wrote on problems connected with determinism and fate in his works *On the Possible*, *On Providence*, *On Nature*, and perhaps in his *On the Gods* and *On the World*. Chrysippus' books on fate, which themselves took up problems raised by others (within the Stoa or by other schools, in oral discussion or in writing), triggered a general debate among the philosophical schools that went on for centuries.

However—if we go by our sources—after Chrysippus there was at first a prolonged silence on the topic. We have no evidence that Arcesilaus (d. 241/0), Academic Sceptic and chief critic of Stoic epistemology in the third century, responded to Chrysippus' books on fate. Nor is there any evidence that Chrysippus' successors as scholarchs in the Stoa, Antipater of Tarsus and Diogenes of Babylon, were concerned with the topic—although the former produced several books *On the Master Argument* and *On the Possible*, a line of writing continued later by Archedemus of Tarsus, pupil of Diogenes. It is with the famous Academic Sceptic Carneades (214/13–129/28 BC), that we know for sure that the discussion on determinism and fate was taken up again. Carneades brought together Epicurus' and Chrysippus' views on determinism (e.g. Cic. *Fat.* 23). His criticism was preserved in writings by his pupils in the second century BC, perhaps by Clitomachus (187–110).

It is a contemporary of Clitomachus (and of Panaetius) who is the next *Stoic* we know to have written on fate: Boethus of Sidon, pupil of

<sup>1</sup> Perhaps he rummaged through Plato's writings, collecting passages relevant to the topic 'fate' like those standardly adduced in Middle-Platonist works on fate. As to Epicurus, we can imagine him arguing against any kind of superstitious belief in fatalism, universal necessity, destiny, religious cults, etc., and perhaps he attacked deterministic elements in the philosophy of his atomist predecessors. But all this is only conjecture. Philod, *Piet.* 1062–6 suggests that one topic Epicurus discussed was the assistance the gods (or the sages) give to human beings (cf. Obbink's commentary on the passage).

Diogenes of Babylon, great-grand pupil of Chrysippus, of whom we know little else, composed at least two books *On Fate* (DL 7.149). Perhaps they were sparked off by Carneades' criticism. In any event, from the late second century BC onwards, the topic 'on fate' seems to have been firmly established in the general philosophical repertoire, and even to have become one of the most discussed topics. This trend continued until at least the third century AD.

In the next generation of Stoics, Panaetius' pupil Posidonius (c.135–51/0) wrote at least two books on fate (DL 7.149). There follow books on fate by Cicero (44 BC), Plutarch (1st cent. AD, lost), [Plutarch] (presumably 2nd cent. AD), Tertullian (2nd cent. AD, second half, lost), some otherwise unknown Peripatetic called Polyzelus (presumably 2nd cent. AD, lost), some Stoic Philopator (presumably 2nd cent. AD, lost), Bardesanes (Eusebius, *Praep. ev.* 6.9), the Epicurean Diogenianus (Eusebius, *Praep. ev.* 6.8), the Cynic Oenomaus, in the context of ranting against oracles (Eusebius, *Praep. ev.* 6.7), Alexander of Aphrodisias (2nd/3rd cents. AD), Origen (Eusebius, *Praep. ev.* 6.11), Plotinus (*Enn.* III 1), Iamblichus (Stobaeus *Ecl.* I 80–1, II 173–6), Eusebius (Eusebius, *Praep. ev.* 6.5–6). There were presumably more books on fate written at this time, of whom not even the fact of their existence has been transmitted. One should note, though, that despite the retention of title and some continuity in the topics discussed, the style of writing, weighting of problems, level of sophistication, etc. differs from school to school and changed considerably over the centuries. In the fourth century AD we find Christian works entitled '*Against Fate*' (κατὰ εἰμαρμένης), e.g. by Gregory of Nyssa and Diodorus of Tarsus (Photius, *Bibl.* 223).

Certainly, in the first two centuries AD every philosophical school and every sect of thinkers, 'Middle Platonists', Peripatetics, Epicureans, Cynics, early Christians, Gnostics, Neo-Pythagoreans, the authors of the Hermetic writings, astrologers, and historians, had their say on fate, determinism, and freedom somewhere in their works.<sup>2</sup> We have no knowledge of any writings on fate by the Roman Stoa, although most mention fate in various contexts.<sup>3</sup>

With Plutarch also starts a tradition of treatises about that which depends on us (τὸ ἐφ' ἡμῶν, later τὸ αὐτεξούσιον, liberum arbitrium),<sup>4</sup>

<sup>2</sup> In addition to the ones mentioned, e.g. Tacitus, *Ann.* 6.22; Favorinus (Gell. *NA* 14.1); Maximus of Tyre, 13.4–5; Lucian, *ŹConf*, *ŹTr* 32; Justin, *Apol.* 2.6–7; Tatian, *Orat. ad Graec.* 7; Tertullian, *An.* 21.6; Manilius, *Astron.* 4.1–118; Vettius Valens, 271.32, 261.24; Ptolemy, *Tetr.* I 3; Aspasius, *EN* 74; 'Hermes' (Stobaeus, *Ecl.* I 79–80, 82, II 16–17).

<sup>3</sup> Sen. *Prov.* 5.7, *Ep.* 101.7, *Marc.* 21.6, *Nat. quaest.* II 34–8; Cornutus, *Epid.* 13; Musonius (Stob. IV 44.60, fr. 42 Hense); Epictetus, *Ench.* 53.1, *Diss.* 2.23.42, 3.22.95, 4.1.131, 4.4.34; Marcus Aurelius, 2.2–3, 12.2.2.

<sup>4</sup> *Lamprias cat.* 154, directed against the Stoics, lost.

which may have taken up topics from Chrysippus' second book on fate, or may have dealt with the more ethics-orientated questions we find discussed in Epictetus.<sup>5</sup> The genus is continued by Neo-Platonists<sup>6</sup> and Christians.<sup>7</sup>

Another development is that at least from the second century AD onwards the originally separate topics of providence and fate are standardly coupled. (Chrysippus had already included a passage on fate in his fourth book *On Providence* (Gell. *NA* 7.2).) This is done under the title of *On Fate* in [Plutarch]; the topics are considered together in Calcidius' *On Plato's Timaeus* (*Tim.* chs. 142–90) and Nemesius' *On Human Nature* (*Nat. hom.* 104–36), and later we find works with the title '*On Fate and Providence*' e.g. by Hierocles of Alexandria (Photius, *Bibl.* 214, 251) and John Chrysostom, and by Proclus.

Up until the third century AD, Stoic theory of fate formed the background to much of the debate over fate and determinism. It was often at the centre of the discussion, and was criticized by virtually every sect or school.<sup>8</sup> Many later theories of fate and freedom started as modifications of the Stoic position.<sup>9</sup> From the middle of the third century onwards, coinciding it seems with the end of the Stoa as a live philosophical school, the Stoic theory of fate and determinism disappears almost completely from the literature on fate. It is still occasionally reported in the commentary tradition (Boethius, Proclus), but appears to be no more than a fossilized view, or receives a mere nominal mention as the representative of universal causal determinism.

This may suffice as an overview of the abundance of works written in antiquity on the topics connected with fate, determinism, and freedom, and of the widespread absorption and discussion of the Stoic position.

The picture looks rather different when we turn to the *situation of the sources*. The Stoics Chrysippus, Boethus, Posidonius, and Philopator composed books about fate—and it is not unlikely that between the first century BC and the third century AD there were more Stoics who did so.

<sup>5</sup> Arrian's records of Epictetus' teaching include an essay entitled *On the things that depend on us and those that do not depend on us* (*Περὶ τῶν ἐφ' ἡμῶν καὶ οὐκ ἐφ' ἡμῶν*, *Diss.* 1.1) and the topic pervades Epictetus' entire surviving work.

<sup>6</sup> Plot. *Enn.* VI 8, Porphyry, in Stob. *Ecl.* II 163–73, Simp. *In Epict. Ench.*, esp. on 1.1, 8, 27, 31.

<sup>7</sup> Methodius, *Περὶ τοῦ ἀντεξουσίου*, and Augustine, *De Libero Arbitrio*.

<sup>8</sup> e.g. Academics (Carneades in Cic. *De Fato*); Epicureans (Diogenianus in Eus. *Praep. ev.* 6.8); Middle-Platonists ([Plut.] *Fat.* 574e, Calc. *Tim.* 160–1); Neo-Platonists (Plot. *Enn.* III 1, Proclus, *Prov. et Fat.* ch. 49); Cynics (Oenomaus in Eus. *Praep. ev.* 6.7, Lucian, *ἸConf*); early Christians (Justin, *Apol.* 2.7).

<sup>9</sup> So it seems the positions of the 'Middle-Platonists', of Origen (e.g. *Princ.* III 1.2–6) of the authors of the Hermetic writings, of some Neo-Platonists, and much earlier of Antiochus of Ascalon, if Cic. *Acad.* I 29 and *Acad.* II 38–9 give his view.

However no Stoic treatise on fate has survived. All we have are second- or third-hand sources. This is not so exceptional, given that hardly any primary sources from Hellenistic philosophy have come down to us. A consequence of this is that writing about the Stoics on determinism and freedom is a very different enterprise from writing on the philosophy of Aristotle, Plato, Lucretius, Cicero, or Plotinus. The mere task of piecing together the Stoic position, or rather Stoic positions, inevitably makes up a large proportion of one's work, before one can even think of interpreting, let alone assessing or criticizing the theory.

As we have just seen, Stoic philosophers wrote on fate over a period of approximately 400 years, from Chrysippus up to those Stoics with whom Alexander of Aphrodisias seems to have engaged in discussion. And although everything suggests that Chrysippus always remained the authority on Stoic fate, it would be rash to conclude that the Stoic theory of fate and freedom remained unmodified over the centuries. The theory was developed, altered in parts, 'improved', and supplemented by later Stoics. Over and above intentional change we can expect well-intentioned but inadequate later Stoic exegesis of Chrysippus' writings. Moreover, over the centuries there are changes in the problems and topics discussed and in terminology, a fact that often goes unnoticed. At about the second century AD there appear to have been several different theories on the same subject, which were all Stoic in a sense.<sup>10</sup> This is not surprising, given that at that time there were Stoic philosophers in virtually every city, who will have had their own way of teaching and spreading the Stoic word.

These are difficulties to be reckoned with in post-Chrysippean *Stoic* sources on fate. However, most of our sources for Chrysippus' theory of determinism, fate, and freedom are *not* Stoic; and very often the different reports do not square, but are incompatible with each other and with what else we know about Stoic philosophy. Polemical misrepresentation, distorting summaries, quotes out of context, etc. take their toll. So one needs criteria for evaluating the reliability of the various fragments and *testimonia*. One useful classification is based on the attributions to philosophers in the passages themselves: we can distinguish between (i) sources that attribute a piece of theory to a particular Stoic philosopher, and add a book-title; (ii) sources that do the same but without book-titles; (iii) sources that attribute a piece of theory to 'the Stoics'; and (iv) sources that show similarities to sources of types (i) to (iii), or other Stoic doctrine, but do not even name the Stoics.

<sup>10</sup> Cf. Galen, *PHP* 4.4.35–8; Plot. *Enn.* III 1 presents and criticizes two Stoic or Stoicizing theories, *Nem. Nat. hom.* 105–6, 108.15–18, 109 preserves different strands of Stoic theory.

By and large sources of type (i) appear most reliable, followed by those of type (ii). The label 'Stoics' in later texts is naturally no warranty that the information is early Stoic, even though it is true that in many cases the theory has its origin in early Stoic philosophy. Reports that do not even claim Stoic provenance need to be considered case by case. The use of (originally) Stoic terminology and general Stoic thought in certain texts does not guarantee that the theory is Stoic. Many of the early Stoic technical terms became general philosophical jargon, and from late Hellenistic times onwards it is not unusual for non-Stoic thinkers to take over those parts of Stoic doctrine that are suitable to their overall purpose and integrate them into their writings in more or less modified form.<sup>11</sup>

But the distinction (i) to (iv) provides very rough guidelines only. There are many other factors that need to be taken into account to get a full picture of the reliability and actual information a source provides. One needs to know to what sort of 'genre' of text a source belongs (handbook, doxography, commentary, etc.), what degree of polemical distortion one has to expect (whether the author's intention is hostile, harmonizing, or eclectic), and whether sources emphasize differences or unity of a school, consistency or incompatibility of their theories, etc. These issues are too complex to be discussed here in full.<sup>12</sup> Let me just name a few points that are germane to the sources on fate: the absence of the attribution of a passage to a school or author may have its reason in the fact that the philosopher addressed is a well-known contemporary of the author; such a text may thus contain verbatim quotations of the philosopher.<sup>13</sup> On the other hand, in certain genres of writing (e.g. in doxographical literature and in those authors who draw from doxography) the occurrence of the name of a philosopher may simply stand in for the general doctrine of a school, and the actual passages given may stem from a much later date. This happens in particular with founders of a school and eminent philosophers who introduced a certain subject.<sup>14</sup> Moreover, phrases that may look as if they mark a verbatim quotation often do no more than introduce a rough paraphrase.<sup>15</sup> Likewise within passages that are presented

<sup>11</sup> e.g. Philo of Alexandria and Origen.

<sup>12</sup> An excellent introduction to the difficulties in working with sources—that should be read by everyone who intends to embark on research in Hellenistic philosophy—is provided by J. Mansfeld in Barnes *et al.* 1999.

<sup>13</sup> Alexander of Aphrodisias' *On Fate* may be an example.

<sup>14</sup> e.g. the naming of Zeno by Eusebius in the heading of the Aristocles fragment in Eus. *Praep. ev.* 15.14.1–2, and by Epiph. *Haer.* 3.2.9, and Hippolytus' mention of Zeno and Chrysippus in *Haer.* 1.21 may fall into this category.

<sup>15</sup> But phrases such as *κατὰ λέξιν* and *ῥητῶς* are usually indicators of verbatim quotes. Other reliable signs may be bits of verse in a prose source, words in a dialect style foreign to the quoting author, etc.



as verbatim quotes, members of later non-Stoic philosophical schools may substitute their own technical terms in place of the original ones without any warning.<sup>16</sup>

The standard collection of Stoic fragments and *testimonia* is von Arnim's *Stoicorum Veterum Fragmenta* (*SVF*). Its second volume, on Chrysippus (and unnamed early Stoics) contains a section entitled '*De Fato*' of 34 pages, covering at least 27 different Greek and Latin authors from the first century BC (Cicero) to the twelfth century AD (Stephanus). It is still the most comprehensive collection on that topic, and as such indispensable. None the less, this collection of fragments and *testimonia* can provide no more than general guidelines.

A large number of texts in the section on fate in *SVF* ii do not report early Stoic theory.<sup>17</sup> Some are not Stoic at all.<sup>18</sup> A number of texts attributed to Chrysippus by von Arnim are not by Chrysippus.<sup>19</sup> If the goal were to cover all evidence on Stoic theory of determinism from Chrysippus onwards, a number of texts would be missing—but this was of course not von Arnim's intention.<sup>20</sup> Several other texts that are of direct relevance to Stoic theory of determinism and fate are placed in other chapters, something that is inevitable in thematically organized collections which cite texts only once.<sup>21</sup> Even in the case of key texts that are included, often bits of the context have been left out that may contain information vital for the decision between rival interpretations, etc. In particular, polemical authors like Plutarch, Diogenianus, Alexander, and Nemesius make use in their criticism of parts of the attacked theories that are not contained in the preceding quotes.<sup>22</sup> Generally in the chapter on fate von Arnim presses the texts into—in part artificial—systematic categories sometimes with little consideration for the argumentative context

<sup>16</sup> Diogenianus in Eus. *Praep. ev.*, may be such a case, perhaps Simplicius in *Cat.*

<sup>17</sup> e.g. almost certainly those by Servius, then *SVF* ii. 943 from Calc. *Tim.* 160–1, and *SVF* ii. 963 from Stephanus, and arguably those by Alexander of Aphrodisias.

<sup>18</sup> In this category seem to fall *SVF* ii. 988–90 by Origen, *SVF* ii. 1007 from Alex. *Quaestiones*, and perhaps some parts from Plotinus.

<sup>19</sup> So *SVF* ii. 912 [Plut.] *Fat*; *SVF* ii. 943 Calc. *Tim.* 160–1; *SVF* ii. 981, Alex. *Fat.*; parts of *SVF* ii. 978 Oenomaus.

<sup>20</sup> For Chrysippus are missing: Cic. *Div.* II 61; Galen, *PHP* 4.4.36; Cic. *Fat.* 26 (*Quod . . . fato evenerint*); and a fragment from Chrysippus' *On Providence* (Gercke 1885, 711 fr. V). For later Stoics: Galen, *PHP* 4.4.38; Nem. *Nat. hom.* 126.22–24; Boeth. *Int.* II 193–6, 217–18; passages about Posidonius (Cic. *Fat.* 5–6, Augustine, *Civ.* 5.2, Stob. *Ecl.* I 78.15–17; Musonius, in Stob. *Ecl.* IV 44.60 fr. 42 Hense; Cornutus, *Epid.* ch. 13, which is however referred to in *SVF* ii. 1007; and other passages from the Roman Stoa (cf. above n. 3).

<sup>21</sup> e.g. Plut. *Stoic. rep.* ch. 46, *SVF* ii. 202; Simp. *Cat.* 406–7, *SVF* ii. 198; Aristocles in Eus. *Praep. ev.* 15.14.1–2, *SVF* i. 98.

<sup>22</sup> e.g. Nem. *Nat. hom.* 105.23–106.7, Plut. *Stoic. rep.* 1055e–f, parts of 1056c, Diogenianus in Eus. *Praep. ev.* 6.8.30, 6.8.35.

—a fact that invites misinterpretation.<sup>23</sup> All these points taken together should make it plain that von Arnim's collection on the Stoics on fate, and indeed all collections of fragments and *testimonia* of this kind,<sup>24</sup> can serve as no more than a starting-point for research on the topic, and that it is essential to consult the sources themselves.

There are only two Stoics for whom we have enough material for the reconstruction of something like a *theory* of fate, determinism, and freedom: Chrysippus, as there are a number of texts that have preserved parts of his books on fate and related works; and an unnamed later Stoic, of whom there is a larger amount of connected material in Alexander of Aphrodisias' *On Fate* and in some parallel sources. There is also a Stoic tradition of connecting the concepts of destiny and providence with Stoic moral philosophy, which may have started with Cleanthes, but is in the main evidenced for the Roman Stoa, and which became popular and influential in the first centuries AD. These facts determine the main structure of this book which is in large parts thematic rather than historical.

Chapters 1 to 6 are concerned primarily with Chrysippus' theory of determinism and freedom. For Chrysippus there are four main sources: Cicero, Diogenianus, Plutarch, and Gellius, and additionally a short passage from Stobaeus. Then there are a number of parallel passages, which, if used with reasonable care, can help a bit further, here and there. Cicero's *On Fate* preserves the largest parts from the theory (mainly *Fat.* 7–9, 11–17, 20–1, 28–30, 39–45). He is also the earliest source. Whether he drew from Chrysippus directly, or used one or more intermediate sources is a moot point, as is how reliable a reporter he is.<sup>25</sup> A main drawback is that he writes in Latin. Next in line is Plutarch, *On Stoic Self-contradictions* (mainly *Stoic. rep.* 1045b–d, 1049f–1050d, 1055d–1055f, 1055f–1056e). Plutarch writes in Greek and seems generally faithful in preserving early Stoic terminology, and—I assume—is fairly reliable in his quotes. However, his purpose and method are highly polemical. He may draw from Chrysippus' works directly, or alternatively from collections of quotes. Gellius' *Attic Nights* (*NA* 7.2) shares with Cicero's works the drawback of being in Latin, and although Gellius is unbiased in his reports, he may

<sup>23</sup> e.g. *SVF* ii. 943 (Calc. *Tim.* 160–1), *SVF* ii. 973 (Plut. *Stoic. rep.* ch. 23), *SVF* ii. 975 (Hipp. *Haer.* 1.21), and perhaps *SVF* ii. 998 (Eus. *Praep. ev.* 6.8.26–9).

<sup>24</sup> There is a still useful collection by Gercke (1885, 715–47, with a helpful index, which however includes many 'Middle Platonist' texts without marking them out as such); and more recently, in Long/Sedley 1987, vol. ii many of the more important texts are presented on pp. 337–41 and 382–9.

<sup>25</sup> Although Cicero himself is not necessarily distorting theories he reports, he seems to have obtained at least some of what he reports from a source that is hostile to the Stoics. He also makes cosmetic changes, like changing examples, enlivening the text by entertaining remarks, and inventing fictitious discussions between philosophers of different ages.

take liberties in his presentation of his source, e.g. to enhance the entertainment value. But he seems to have drawn directly from a work by Chrysippus. Eusebius, in his *Preparation for the Gospel* (*Praep. ev.* 4.3 and 6.8), has preserved parts of the writings on fate by the Epicurean Diogenianus, in which the latter criticizes Chrysippus. (Diogenianus can presumably be placed in the 2nd century AD, and Eusebius is a very reliable quoter.) Diogenianus undoubtedly draws directly from Chrysippus' books *On Fate*;<sup>26</sup> he preserves some larger passages from these books. His purpose is in the main polemical. He may also change Stoic into Epicurean terminology, even in what appear to be verbatim quotes. Finally, the short quotes on fate from various of Chrysippus' books in Stobaeus' *Eclogae* I 79 (5th cent. AD) seem reasonably reliable but are very short and out of context.

Taken together, the above sources suggest that Chrysippus did not set out his theory of determinism and fate in his books on fate—rather that he had done so beforehand in several of his physical writings (my Chapter 1 traces some of these parts of his theory). The two books on fate, it seems, were both written in response to certain criticisms of his theory, or generally early Stoic theory of fate as developed in other writings, or as taught in the school. It was structured around arguments that served to defend his theory against external (and perhaps also school-internal) criticism. A recurrent pattern is the presentation of an—unnamed—opponent's argument, a refutation of that argument, connected with or followed by an elucidation of Chrysippus' theory, often demarcating it from related theories. His first book on fate seems to have been devoted to the defence of the principle that everything happens in accordance with fate; his second, to the defence of the compatibility of the Stoic theory of fate with other vital tenets of their philosophy, and with certain everyday assumptions. (The concentration on arguments or argument clusters in Chrysippus' books on fate is not particular to him—a large part of the discussion of fate and determinism in ancient philosophy follows the same method.)

This focus on certain arguments provides the structuring principle for the chapters on Chrysippus' theory. Chapters 2 to 6 are in the main ordered according to certain types of arguments. (Chapter 3 starts with an introduction to Hellenistic modal logic, since this is necessary for the understanding of several of the arguments.) In each chapter the main focus is on Chrysippus, but I add earlier and later Stoic views that belong to the same topic, and also include views, arguments, and counter-arguments of the opponents of the Stoics where this helps to better understand the

<sup>26</sup> The facts that Diogenianus drew from Chrysippus' books *On Fate* directly, and that for instance Gellius and Galen still had access to Chrysippus' works, suggest that Chrysippus' books *On Fate* were available at least up to the 2nd cent. AD.

Stoic position. In the last part of each chapter I develop the information about the problem of determinism and freedom that can be extracted from the argument(s). In this way, from chapter to chapter, Chrysippus' theory of determinism and freedom emerges, and taken together the chapters provide an interpretation of the whole theory as far as it is documented. Thus, in Chapter 1 the conception of causal determinism is extracted, in Chapter 2 the relation between causal determinism and future contingencies, in Chapter 3 the relation between Chrysippus' determinism, freedom of action, and necessitarianism, in Chapter 4 the relation between universal regularity as used in empirical sciences, and causal relations is expounded, in Chapter 5 the relation between purposeful action and Chrysippus' determinism, and the relation between it and naive fatalistic theories. And finally Chapter 6 leads to the discussion of the important questions of the compatibility of moral responsibility with Stoic causal determinism, the question of the role of freedom, free will, and the determination of character, the relation between fate, causation, and necessity within Chrysippus' theory.

The emphasis of ancient philosophers on arguments about fate also has an impact on the way in which I deal with the fragments and *testimonia*. Chrysippus was a first-rate logician who produced several hundreds of books on logic, and no one in ancient philosophy except perhaps Aristotle holds a candle to him. He had a keen awareness of the importance of the validity of one's arguments and the consistency of one's reasoning. Accordingly, Chrysippus' logic is ubiquitous in his work. I take some pains in showing how Chrysippus' theory of arguments is involved in our sources of his theory of fate. I do this not only for the sake of it—although that would presumably be sufficient justification. Rather, in order to find out what were Chrysippus' views, or those of his opponents to which he responds, it is often vital to reconstruct the argument: if it is Chrysippus', it should be possible to reconstruct it in line with his syllogistic (or his logic of arguments in general). Such a reconstruction would be a plus for the right interpretation. If the argument is by his opponents, we can often see by the way Chrysippus reacted to it whether he thought of the argument as invalid, or only of some premises as false. Again, this gives clear constraints on plausible interpretations. Hence I often examine the argumentational context, analyse the argument structures, and consider the question of validity and soundness of the arguments, before I concern myself with their philosophical content. Interestingly enough, in all cases it is possible to reconstruct arguments in such a way that they fit perfectly into Chrysippus' syllogistic.

Chapter 7 differs from Chapters 2 to 6 in structure, method, and outlook. Following up the various ways in which ethics, and the concept of freedom as developed in Stoic ethics (*ἐλευθερία*) are traditionally linked with the

Stoic theory of determinism and destiny, the nature of this chapter is in the main negative: certain connections that have been drawn are presented, and I examine whether they are warranted as far as Chrysippus' theory is concerned. In this context, Epictetus' theory of the things that depend on us (*τὰ ἐφ' ἡμῖν*) and moral freedom (*ἐλευθερία*) and of their relation is considered, and similarities and differences to early Stoicism are expounded.

Chapter 8 attempts to reconstruct the Stoic theory of fate as we have it in Alexander of Aphrodisias and related texts, and to put it into the context of the ancient contemporary discussion of the 'free-will problem'. This theory seems orthodox Stoic, i.e. not intentionally deviating from the earlier, Chrysippean one. However, the general philosophical climate had noticeably changed in the mean time, and with it the problems discussed, the objections, and the terminology. This left its traces both in the theory and in the way it was presented and criticized.

No doubt, many readers will find missing some things they expected or hoped to be dealt with in this book. Let me explain the rationale behind some of my omissions.

As I said at the beginning, my main interest lies with the problems the Stoics faced which arose from a physical theory of universal *causal* determinism. This is what is most relevant to modern mainstream philosophy. More to the point, this is also what Chrysippus was mainly concerned with in *his* books on fate, as far as our sources go: again and again, he tries to get through to his opponents that *his* theory is not naïve fatalism, logical determinism, necessitarianism, and that *it* is compatible with reasonable concepts of contingency, action, and moral responsibility. It is the history of *this* theory and the related problems which I follow through from the beginning to the end of Stoic philosophy.

The difficult situation of the sources determines in part which philosophers I focus on. I refrain from saying much about those Stoic theories on fate that no doubt were there, but for which there is no or hardly any reliable, detailed source. This explains why Zeno, Cleanthes, Antipater, Boethus of Sidon, and Posidonius play only very subordinate roles in the book. The amount of speculation required for saying anything about the theories of the latter three is out of proportion to any possible gain. With the first two the problem is rather that we do not know if or how far they were aware of the problems Chrysippus dealt with in his writings on fate.

Likewise, the Roman Stoics feature mainly insofar as they show awareness of and deal with the general topics and problems Chrysippus discussed; and that is very little. Seneca is perhaps a special case. I have left him out almost completely as a philosopher in his own right, and used him mainly as a source for Stoic thoughts on determinism in general. This is because there is too much, too unorthodox, too difficult, too

unstructured material, to fit in without diverting into a special study of Seneca's philosophy and his Stoicism as a whole.

Thematically, the following omissions may be most obvious:

*Political freedom*: this does not impinge on the problems Chrysippus discussed. Whether the overall deterministic system of the Stoics had some bearing on their political theory is of course a topic worth following up, but goes beyond the scope of this book.

*Providence*: providence is related to the Stoic theory of fate, and this fact is taken into account in Chapter 1, and it recurs in later chapters. However, the various problems Chrysippus was concerned with in the context of causal determinism are almost entirely independent of the special philosophical problems discussed under the heading of providence in early Stoic philosophy—which centre around the question of how human experience of the world squares with the Stoic tenet that the world is organized by God or Nature so that it is the best possible world. The central position providence has in later writings on fate is not documented before the turn of the millenium.

*The concept of the will*: the development of the concept of the will is a topic that has been discussed in depth over the past decades,<sup>27</sup> and it is clearly related to the problem of determinism and freedom. However, as I see it, the development of the concept of the will did not spring from the discussion of early Stoic determinism and freedom. This is not to deny that the early Stoic concept of assent (*συγκατάθεσις*), and in its wake, the Epictetan concept of *προαίρεσις*, are essential both for the development of the concept of the will and for the problem of the compatibility of determinism and moral responsibility. As far as is required, I say a few things about the topic, especially in sections 6.3.3–6 and 8.7, but I do not intend to be anything like comprehensive on this matter.

*Astrological fate*: from late Hellenistic times onwards we have evidence for several theories of astrological fate, which are all concerned with the specific significance the stars and their constellations have for certain kinds of sublunary events. Usually a causal influence is assumed from the position of the stars to those events. The extent of Stoic involvement in this cluster of theories is quite uncertain, although it seems that Posidonius stressed the 'sympathetic' relation between the stars and earthly occurrences.<sup>28</sup> Already in antiquity astrological theories of fate were distinguished from what was called 'physical fate', and it is the latter with which orthodox Stoic theory was standardly connected.<sup>29</sup>

<sup>27</sup> e.g. Gilbert 1963, Voelke 1973, Dihle 1982, Kahn 1988.

<sup>28</sup> Cic. *Fat.* 5–6, Augustine, *Civ.* 5.2.

<sup>29</sup> Cic. *Div.* I 125, Tacitus, *Ann.* 6.22, Augustine, *Civ.* 5.9, SE *M* 5.5; Nemesius presents two theories of astrological fate (*Nat. hom.* 104, 106), both contrasted with the orthodox Stoic theory (*Nat. hom.* 105).

Two further issues receive very little attention in this book: first, the question of the philosophico-historical background from which the Stoic theory of determinism and freedom developed. No doubt there were multiple influences from Platonic, Peripatetic, Megaric, and Presocratic thought, and I do not intend to belittle any of these. It is, however, difficult to establish exactly what comes whence, and for most of what I have to say this is immaterial. I add historical remarks where I consider them necessary for the understanding of the Stoic position; apart from that I leave this topic to be pursued further by others.

Readers will also not find comparisons of the Stoic theories of determinism and freedom with any specific modern ones. Such comparisons have often been made. But—as has been said at the beginning—the focus in this book is rather on the differences: on how the problems appear to philosophers who start with a different ontology, different concepts of cause and proposition, a different general conception of ethics, a different theory of the mind, etc. No doubt it is correct that some of the things Chrysippus said are vaguely similar to some of the things LaPlace, Hume and Kant, Davidson, Frankfurt, and Chisholm said, and it is worth pointing this out. But on the whole I find that the comparisons that have been made have often served to blur the discrepancies between ancient and modern theories, and have led philosophers to read things into our sources which I have difficulty in finding there. My primary goal is to establish—as far as that is possible—what the Stoic positions were, and to make them comprehensible to modern readers. Having said this, I should add that I have done my best to present the Stoic theory in such a way that the main differences from modern theories become apparent, and are easy to grasp.

It is in this context that the mere presentation of the Stoic theory at times becomes a difficult matter. Since the Stoics ground their philosophy on some basic logical and ontological assumptions which differ substantially from those of ‘standard’ modern philosophy, occasionally the only way to make these differences apparent, and to keep the reader from falling back into entrenched (non-Stoic) patterns of thinking, is by using artificial terms and seemingly complicated ways of expression. This is so in particular with the following points:

- For the Stoics, causes are corporeal entities, whereas effects are incorporeal. This leads necessarily to different ways of formulating causal determinism from those we find in most modern theories.
- The Stoic concept of proposition (*ἀξιωμα*) differs from standard modern concepts in that it operates with a temporalized concept of truth.
- Consequently, the relation between the Stoic concepts of effect, motion, qualitative states and events on the one hand, and the Stoic concept of

proposition on the other differs noticeably from the relations between the modern concepts that form their (near-) counterparts. These problems are discussed in some detail in sections 1.1.2 and 1.1.3.

This book is written with those in mind who have an interest in philosophy. This means that historical and philological questions are treated strictly as subordinate to the question of what the respective philosophical position was, whether it was consistent, etc. There are enough textual and historical problems left, owing to the difficult nature of our sources. Some of these may bore the philosopher-only. Accordingly, I sometimes put them in separate sections, marked by an asterisk, that can be skipped, or consulted after reading a chapter, if required. Likewise, I have been generous with cross-references. (I also suspect that not every reader will be interested equally in all the philosophical topics I cover. Readers with a lesser interest in questions of logic may want to skip Chapter 2, and Sections 3.1–3 and 5.1. Readers whose main interest lies with the problem of the compatibility of determinism with freedom and moral responsibility may want to focus on Chapters 1, 6, 7, and 8; they may obtain additional information on the topic from Sections 3.1.5, 3.4.2, 4.2.2–4, and 5.3.)

My general view is that readers should be given a chance to make up their own minds on the issues I discuss. I thus have quoted all the crucial passages in full, in the main text in translation and in footnotes in the original Greek or Latin. For the same reason I also often present the main text or texts about a topic first, so that the readers can form their own views before taking in mine. Full quotation of the texts discussed seems advisable also for the simple reason that so many different sources are involved, some hard to come by, and I do not expect the reader to have a full library at hand when dipping into this book.

I have provided translations of all texts discussed, so that what I say is accessible to readers without Greek and Latin. However, occasionally important interpretational points hang upon how one reads the text, whether or not one emends it, or how one renders an expression. In such cases, naturally, translation is of little help. But these cases are rare and care has been taken to allow the Greekless or Latinless reader to get the gist of what is going on.



# Determinism and Fate

Although from the second century BC to the third century AD the problems of determinism were discussed almost exclusively under the heading of fate, early Stoic determinism, as introduced by Zeno and elaborated by Chrysippus, seems to have been developed largely in Stoic writings on physics, independently of any specific ‘theory of fate’. Stoic determinism is firmly grounded in Stoic cosmology, and some basic concepts from Stoic physics and ontology are indispensable for a full understanding of the specific texts on determinism (1.1). Stoic determinism was originally not presented as causal determinism either, but with a strong teleological element, and in the context of a theory of natural motions and states (1.2). However, Chrysippus also employed his conception of causality and causal principles in order to explicate his determinism (1.3). The various elements of early Stoic determinism are brought together in Chrysippus’ conception of fate (1.4).

## 1.1 PHYSICAL AND ONTOLOGICAL FOUNDATIONS

This section introduces in a preliminary and simplifying manner those basic elements of Stoic physics and ontology that are of general relevance for an understanding of Stoic determinism and the Stoic concept of fate. The emphasis is on two essential points: the relation between corporeal and incorporeal elements in Stoic physics (e.g. cause and effect), and the role of qualitative states and motions in Stoic causal theory. Any points of detail that are connected with specific arguments will be added later when and where they are needed.

### 1.1.1 *The active principle*

The world (*κόσμος*), or as the Stoics also call it, the universe (*τὸ ὅλον*) is a unitary and continuous body, without any gaps in between; it is located in the void (*τὸ κενόν*), and it contains no smallest parts or atoms.<sup>1</sup> Stoic

<sup>1</sup> DL 7.140, 143, 150; SE *M* 9.332. I here talk about the *κόσμος* in the third of the senses the Stoics give to that word (DL 7.137–8).

physics can thus be classified as a continuum theory.<sup>2</sup> The world is constituted of two principles (*ἀρχαί*), the active and the passive (DL 7.139). The passive principle is called 'matter' (*ὑλη*) and '(unqualified) substance' (*(ἄπειρον) οὐσία*); it is amorphous and unqualified; it possesses neither power of cohesion nor power of movement.<sup>3</sup> The active principle is called variously 'god', 'reason of the world', 'cause of the world', and among further things, 'fate'; it is eternal, self-moved, and a power (*δύναμις*); it is responsible for all form, quality, individuation, differentiation, cohesion and change in the world.<sup>4</sup> The two principles are both material.<sup>5</sup> In physical terms, for Chrysippus, the active principle is *pneuma* or breath (*πνεῦμα*), which is a special combination of air and fire; the passive principle is a combination of earth and water.<sup>6</sup> (For Zeno, physically the active principle is craftsmanlike or creative fire (*πῦρ τεχνικός*).) The two principles form a complete blending (*κρᾶσις*) both in the world as a whole, and in any object in the world (Alexander *Mixt.* 224–5); that is, they are completely co-extended, but they and their respective qualities are fully preserved in that mixture, and they are in principle separable again.

Of recurring pertinence to the understanding of Stoic physics, and of Stoic determinism in particular, is the distinction between a global perspective, which considers the whole cosmos as one unified entity, and the innerworldly perspective, which looks at particular objects and their interrelations in the universe. The active principle is responsible both for the cohesion, form, and change of the cosmos as a whole, and for the individuation, cohesion, form, change, and duration of the objects in the world.

The individual objects in the world are each held together (as the objects they are) by the active principle, which gives them a certain tension or tenor (*ἐξίς*). Different objects have different complexity, owing to the complexity of the tenor in them. With increasing complexity, inanimate objects have tenor (in the specific sense, *ἐξίς*); plants have nature (in the specific sense, *φύσις*); non-rational animals have soul (*ψυχή*); and rational beings have reason (*λόγος*) as their highest organizing principle. But they also have all the lower kinds of tenor. Physically, these kinds of tenor are *pneuma* of increasing purity or fineness. The finest *pneuma*, reason, is situated in beings of the highest order, i.e. rational beings, in the ruling part (*ἡγεμονικόν*) of their soul.

<sup>2</sup> For details on this point and for Stoic physics in general cf. Sambursky 1959, Bloos 1973, and Lapidge 1978.

<sup>3</sup> DL 7.134, 139, 150, SE *M* 9.75, Sen. *Ep.* 65.2.

<sup>4</sup> DL 7.139, SE *M* 9.75–6, Sen. *Ep.* 65.2, Plut. *Stoic. rep.* 1054a.

<sup>5</sup> e.g. Aristocles in Eus. *Praep. ev.* 15.14.1. I take this formerly controversial point as settled; for a discussion of the pros and cons see Forschner 1981, 30–41, Long/Sedley 1987, i. 270–2; 273–4.

<sup>6</sup> Nem. *Nat. hom.* 52.18–19; Plut. *Comm. not.* 1085c–d.

The world as a whole is a being of the highest order, i.e. a rational being, too (DL 7.142–3). Just like human beings, in addition to tenor, nature, and a soul, it has reason. This rational organizing principle, the reason of the cosmos, is sometimes called ‘god’, sometimes god’s soul, god’s nature, or god’s ruling principle.<sup>7</sup> Sometimes it is placed in the aether, as the accumulation of finest pneuma in the cosmos. Our sources switch between calling all of the active principle the ‘reason of god’ or ‘reason of nature’, and identifying only the finest part of it with reason.

### 1.1.2 *Causation*

Stoic determinism is causal determinism in one of its main aspects (1.3). Causality is central to much of its discussion in antiquity. Moreover, fate is repeatedly defined in terms of causes, and the Stoic statement that no change happens without an antecedent cause is one of the most disputed tenets of Stoic determinism. However, one should beware of rash comparisons with modern theories of causal determinism. Modern theories may consider causes as events, facts, things, or properties of things, but mostly there is the assumption that cause and effect belong to the same ontological category, and that what is the effect in one instance of causation can be a cause in a subsequent such instance. This is where the Stoics differ: for them causes and effects belong to two clearly different ontological categories, and this has various consequences for their account of determinism.<sup>8</sup>

Here are two Stoic accounts of ‘cause’—one by Chrysippus, the other attributed to the Stoics in general, but which I assume to tally with Chrysippus’ theory:

Chrysippus states that a cause is that because of which; and that the cause is an existent thing and a body, <and that of which it is a cause is not existent and is a predicate;> and that the cause is ‘because’, and that of which it is a cause is ‘why?’.<sup>9</sup> (Stob. *Ecl.* I 138.23–139.2)

... the Stoics say that every cause is a body which becomes a cause, to a body, of something incorporeal; as for instance the scalpel, which is a body, becomes a cause, to the flesh, which is a body, of the incorporeal predicate ‘being cut’.<sup>10</sup> (SE *M* 9.211)

<sup>7</sup> Plut. *Stoic. rep.* 1052c, Alex. *Mixt.* 225.1–2, Plut. *Stoic. rep.* 1053b.

<sup>8</sup> For Stoic theory of causation in general cf. M. Frede 1980 and Bobzien 1998b.

<sup>9</sup> Χρυσίππος αἴτιον εἶναι λέγει δι’ ὃ· καὶ τὸ μὲν αἴτιον ὄν καὶ σῶμα, <οὐ δὲ αἴτιον μὴ ὄν καὶ κατηγορήμα>\* καὶ αἴτιον μὲν ὅτι, οὐ δὲ αἴτιον διὰ τι.

\* Some emendation is required. My suggestion is based on the parallel for Zeno (Stob. *Ecl.* I 138.5–16) and Posidonius (Stob. *Ecl.* I 139.7–8): both contrast αἴτιον as σῶμα with οὐ δὲ αἴτιον as κατηγορήμα and both provide positive characterizations of the οὐ δὲ αἴτιον. These parallels are not borne out by Wachsmuth’s emendation <οὐ δὲ αἴτιον μήτε ὄν μήτε σῶμα>, which has been taken over by von Arnim and Long/Sedley.

<sup>10</sup> ... στωικοὶ μὲν πᾶν αἴτιον σῶμά φασι σώματι ἀσωμάτου τινὸς αἴτιον γίνεσθαι, οἶον σῶμα μὲν τὸ σμιλίων, σώματι δὲ τῇ σαρκί, ἀσωμάτου δὲ τοῦ τέμνεσθαι κατηγορήματος.

Every instance of causation involves at least three main factors, two corporeal, one incorporeal. (For reasons of convenience, I individuate instances of causation by assuming one such instance per effect.)<sup>11</sup> One corporeal is the cause, the other the object to which it is the cause, and at which the effect obtains. The effect, i.e. that which is caused, is immaterial and obtains at the second corporeal. It is regularly determined as being a predicate.<sup>12</sup> In cases in which different causes work together in one instance of causation the factors are multiplied.

The account of the cause as ‘that because of which’ (δι’ ὃ) as well as the description of the pair of cause and effect as ‘because’ / ‘why?’ (if the text is not corrupt here) and as ‘cause’ / ‘that of which it is a cause’ exemplify that cause and effect are relative to each other, and inseparable: a cause is not a particular thing, but that thing *insofar as it produces its effect*.<sup>13</sup> In fact, for some Stoics, cause is relative in two respects:

They say that cause is a relative (πρός τι). For it is cause of something and to something, as the scalpel is the cause of something, viz. the cutting, and to something, viz. the flesh.<sup>14</sup> (SE *M* 9.207, cf. also *M* 9.239)

For the Stoics, thus, all interaction is interaction *between bodies*, with one body acting upon another. Incorporeals can neither act nor be acted upon.<sup>15</sup> Hence effects, being incorporeal, can neither bring something about, nor can they be acted upon. But when the interaction between bodies is described as causation, it is described as the relation between one or more bodies as causes and the incorporeal effect that obtains at another body.

The most basic Stoic distinction between interactions of bodies, is that between sustenance (sustaining something / being sustained by something) and change (changing something / being changed by something). All sustenance and change is potentially two-faced in this way: it depends on one’s chosen perspective whether one describes one body as affecting another, or that other body as being affected by the first.<sup>16</sup> Correspondingly, the most basic distinction between types of causes is that between causes of qualitative states (σχέσεις) and causes of changes (κινήσεις). On the level of causal explanation, the Stoics would not only ask for the cause

<sup>11</sup> For the individuation of effects see below 1.1.3.

<sup>12</sup> Stob. *Ecl.* I 138.15–16; 139.7–8; SE *M* 9.211; Clement, *Strom.* 8.9 96.23–97.1.

<sup>13</sup> Cf. e.g. SE *PH* 3.25, most certainly drawing from a Stoic source.

<sup>14</sup> Τὸ αἷτιον τούτων, φασί, τῶν πρὸς τι ἐστίν· τινὸς γάρ ἐστιν αἷτιον καὶ <τινί>, οἷον τὸ σμῖλλον τινὸς μὲν ἐστὶν αἷτιον καθάπερ τῆς τομῆς, τινὶ δὲ καθάπερ τῇ σαρκί.

That this is Stoic is evident from the very close parallel in SE *M* 9.211, quoted above, which uses the example in largely the same formulation. Whether this double-relativity goes back to Chrysippus is uncertain, but it certainly squares with what we know of his theory.

<sup>15</sup> Nem. *Nat. hom.* 21.6–7 (Morani); SE *M* 8.263; Plut. *Comm. not.* 1808e.

<sup>16</sup> For change (κίνησις) cf. Simp. *Cat.* 306.14–15 τὸ κοινὸν τοῦ ποιεῖν καὶ πάσχειν εἶναι τὴν κίνησιν, although Simplicius may draw from a later Stoic source.

of why something has changed, but also for the cause of why something keeps on being what it is and in what state it is. The requirement of causes of (the sustenance) of qualitative states<sup>17</sup> is a consequence of the Stoic assumption of the two principles, the active and the passive. As we have seen above, the active principle is not only the sole source of movement, it is also required for any qualitative state of an object to continue, and for any object to continue to be that object; and the active principle is regarded as the cause of both movements (it brings them about) and qualitative states (it keeps them up).<sup>18</sup>

The active principle is also the main reason why for the Stoics all causes are *active* causes (ποιιοῦν, ἐνεργοῦν), and Aristotelian or Peripatetic formal, material, and final causes, as well as mere necessary conditions, do not qualify. For example Seneca writes 'the Stoics hold that there is one cause, viz. that which does something'<sup>19</sup> (*Ep.* 65.4), and Sextus reports of all dogmatists, including the Stoics, that a cause is that 'because of which, it being active, the effect comes about'<sup>20</sup> (*SE PH* 3.14). In an instance of causation, only those factors that actively contribute to the effect are causes proper. There is thus for the Stoics a difference between the cause or causes of an effect, and all the other factors involved, including those things that are necessary conditions for the effect, but do not actively contribute to it. And such active contribution is equally involved in causation of change and in causation of qualitative states.

A main characteristic of causes of qualitative states is that they are simultaneous with their effect. The most prominent causation of qualitative states is that involving a cohesive cause (συνεκτικὸν αἴτιον): the cohesive cause is that portion of pneuma in an object that is—and insofar as it is—responsible for the object being the object it is. This seems to be the same pneuma as the tenor (ἔξις in the general sense) in each object. Thus for the ongoing existence of an object, the presence of a cohesive cause is a necessary condition.<sup>21</sup>

The main characteristic of causation of change in the world is that a co-operation of two causes or causal factors is required, of which one has to be antecedent to its effect. Since for the Stoics all causes are corporeal,

<sup>17</sup> I render *σχέσις* by 'qualitative state' in order to remind the reader that this is a kind of effect, i.e. something that requires a cause for its sustenance.

<sup>18</sup> Cf. e.g. Plut. *Stoic. rep.* 1054a.

<sup>19</sup> Stoici placet unam causam esse, id quod facit.

<sup>20</sup> Δι' ὃ ἐνεργοῦν γίνεται τὸ ἀποτέλεσμα. See also M. Frede 1980, 225–6, on the Stoic conception of causes as active.

<sup>21</sup> Συνεκτικὸν αἴτιον appears to be the later Stoic technical term for such causes. There is no evidence that Chrysippus had a technical term for such causes, rather he seems to have used various forms of *συνέχειν* (to hold together) and related verbs (cf. Plut. *Stoic. rep.* 1053f, *συνέχεται*, *συνεχομένου*, *συνέχων*; similarly Alex. *Mixt.* 233–4, reporting Stoic doctrine: *συνέχεσθαι*, *συννοχή*, *συνεχῇ*, *συνέχεια*, *συνέχον*).

some elucidation is needed for what it means for a *body* to be such an antecedent cause. For in most cases of causation this body will exist before, during, and after the effect obtains. 'Antecedent' can thus not refer simply to the time at which the body exists. One needs to take into account that as cause the body actively contributes to its effect, and that causes are relative (*πρός τι*). Thus the body *is* the antecedent cause only insofar as it actively contributes to the effect. I thus suggest that, as a minimal condition, *c* is an antecedent cause of an effect *e*, if the period of time at which *c* is active in contributing to *e* precedes, at least in part, the period of time at which the effect obtains.

### 1.1.3 Motions and qualitative states

The role of causation of qualitative states in Stoic physics, and in particular in Stoic theory of determinism, is often neglected. This is so, I suspect, partly because there are no equivalents to these in later physical theories (including later ancient physics), and partly because it is the *causal predetermination* of changes that is the primary matter of contention, not the *causal simultaneous* determination of states.

But the pair of nouns 'movement/qualitative state' (*κίνησις* / *σχέσις*) together with the corresponding pair of verbs 'to move/to be in a qualitative state' (*κινεῖσθαι* / *ἵσχεσθαι*) appear frequently in Stoic philosophy, and they denote a standard Stoic distinction.<sup>22</sup> For our purposes most important is the repeated occurrence of the two expressions as a pair in Plutarch's excerpts from Chrysippus' first book *On Nature*, where Chrysippus gives an account of his determinism.<sup>23</sup> Plutarch clearly recognizes the pair as a Stoic technical distinction; and—for the purposes of refuting Chrysippus—he adduces examples of both movements and qualitative states, which he assumes the Stoics would accept (*Stoic. rep.* 1050d):<sup>24</sup> for qualitative states he lists 'vices, diseases, the loving of money, the loving of pleasures, the loving of glory, the states of being a coward, and the states of being unjust'; for movements the acts of adultery, theft, betrayal, homicide and parricide.<sup>25</sup>

<sup>22</sup> So acknowledged by Long/Sedley 1987, e.g. ii. 176.

<sup>23</sup> *Stoic. rep.* 1050c, 1056c; *Comm. not.* 1076e; passages quoted in 1.2.

<sup>24</sup> Plutarch's focus on negative things as examples is grounded in the argumentative context, see below 1.2, note 44.

<sup>25</sup> Further Stoic or Stoicizing passages that invoke the distinction of movements and qualitative states are: Stob. *Ecl.* II 73.1, 82.11–17 and 95.6–8, DL 7.104, Cic. *Fin.* III 33 (all in the context of ethics); Origen, *Orat.* 2.368, Plot. *Enn.* III 1.7 (in the context of fate); Stob. *Ecl.* I 166.24–167.14; Simp. *Cat.* 212–13; see Galen, *PHP* 4.4.17 and 4.6.6 for the related pair of expressions *κινήσεις* and *καταστάσεις* (cf. also Forschner 1981, 65); Ariston versus Chrysippus on virtue: Galen, *PHP* 7.2; Plut. *Stoic. rep.* 1034d.

The individual movements (*κινήσεις*) and qualitative states (*σχέσεις*) are of special interest to us, since they are precisely those entities that are effects of instances of causation. What is their ontological status? Although several definitions and some additional information are extant, the answer depends in part on inferential reasoning. We can be confident that they are incorporeals, since they are effects, and effects are incorporeal (see 1.1.2). If they are incorporeals, they must be either void, time, place, or 'what can be said' or 'sayables' (*λεκτά*), these being the only kinds of incorporeals the Stoics admit (SE *M* 10.218). Of these, they can reasonably only be sayables. This fits in with the account of effects as belonging to the 'things that can be predicated' or 'predicates' (*κατηγορήματα*, see 1.1.2), which are in turn a subclass of the sayables. But matters are a bit more complex.

First, the definitions of movements and qualitative states: Chrysippus had, it seems, a narrower and a wider concept of movement. He defined movement as 'change concerning space, either to the whole <body> or to a part of it' and similarly as 'alteration from space, concerning either the whole <body> or a part'.<sup>26</sup> Here movement is locomotion. Another definition is 'alteration concerning space or shape <either to the whole body or to a part of it>'.<sup>27</sup> In this account, movement includes any change or process. For 'shape' (*σχῆμα*) stands for all qualitative features of an object (cf. also SE *M* 9.75, Plut. *Comm. not.* 1054a). This wider definition is the one of primary relevance for the theory of determinism.

Chrysippus also produced two definitions of 'permanence' or 'continuity' (*μονή*): 'absence of movement (*ἀκίνησία*) of a body', and 'qualitative state (*σχέσις*) of a body, concerning the same features and in the same way, now and before' (Stob. *Ecl.* I 165.19–21). *Σχέσεις* here, being a type of *μοναί*, and having a duration, must be (incorporeal) qualitative states things are in, and not the (corporeal) being qualified of things. In the same philosophical context, Apollodorus defines 'qualitative state' (*σχέσις*) as continuity/coherence (*συνοχή*) <of a body> concerning space or form' and 'the being in such a state' (*τὸ ἴσχεσθαι τοιοῦτο*).<sup>28</sup> There may be a doubt whether Apollodorus' first *definiens* defines an incorporeal; but there can be no doubt that the second does. And it is *σχέσις*, as synonymous with *τὸ ἴσχειν* / *τὸ*

<sup>26</sup> Stob. *Ecl.* I 165.15–17, cf. SE *M* 10.52.

<sup>27</sup> *κίνησιν μεταλλαγὴν κατὰ τόπον ἢ σχῆμα <ἢ ὅλω ἢ μέρει>* Stob. *Ecl.* I 165.17–18. The supplement is taken from Chrysippus' previously quoted narrower definitions of *κίνησις*; it finds justification in its occurrence in Apollodorus' parallel definition, Stob. *Ecl.* I 166.24–6.

<sup>28</sup> Stob. *Ecl.* I 166.26–7. The Stoic Apollodorus was presumably a pupil of Antipater (*Ind. Stoic.* col 53.7). The excerpt on *σχέσεις* and *κινήσεις* from his work *Handbook of physics* (*Φυσικὴ τέχνη*) in Stob. *Ecl.* I 166–7 overlaps in large parts with Chrysippus' accounts (Stob. *Ecl.* I 165–6). It reads like a systematization of early Stoic doctrine. As there are no inconsistencies with earlier Stoic theory, I assume that the excerpt generally squares with Chrysippus' view.

ἴσχεσθαι, and equally κίνησις as synonymous with τὸ κινεῖν / τὸ κινεῖσθαι, which are incorporeals, predicates, and the effects of causation—and about which Chrysippus talked in the Plutarch passages mentioned above.

Qualitative states, as is clear from the definition, have a duration. So, too, do motions, as we can extract from Apollodorus' handbook of physics: in line with Stoic continuum theory and the indefinite divisibility of time, Apollodorus states that for every movement there is a movement that is part of it; and for every qualitative state there is such a state that is part of it (Stob. *Ecl.* I 167.9–14).<sup>29</sup> This statement needs careful reading. Recalling the definitions of qualitative states, we can conclude that qualitative states are homogeneous: every state that is a temporal part of a state is of exactly the same kind as the state of which it is a temporal part. Motions, though, are not homogeneous: the fact that for every motion there is a motion that is part of it does not entail that the motion that is part of it is *of the same kind* as the motion of which it is a part. And indeed, taking Stoic examples for motions, this sometimes will be so and sometimes not. That is, some Stoic motions are homogeneous, some are not—a fact that brings the Stoics into trouble in various respects, which however do not concern us here.

For further understanding of the Stoic concepts of motion and qualitative state we have to follow up the trail that—in some sense at least—they are 'sayables' (λεκτά). There are two ways of conceiving of Stoic motions and qualitative states here: one is connected with predicates, the other with propositions.

The connection with predicates is amply documented through the notion of effect: effects are predicates. The Stoics define predicate as 'what is asserted of something, or a thing (πρᾶγμα, presumably standing in for λεκτόν, 'sayable') attachable to some thing or some things'.<sup>30</sup> Examples of predicates are 'to walk', 'to be alive', 'to be seated'. Predicates can be actualized, i.e. subsist at something or hold of something (ὑπάρχειν with dative), and can be not actualized. When actualized, they are called 'actualized predicates' or 'attributes' (συμβεβηκότα) (Stob. *Ecl.* I 106.20–3). The being actualized of a predicate is best explained by example: the predicate 'to walk' holds of me (and is thus actualized at me), precisely when I am actually walking (Stobaeus, *ibid.*).<sup>31</sup>

<sup>29</sup> Cf. also, for Chrysippus, Stob. *Ecl.* I 106.8–9: 'everything moves and exists through time' (καὶ κατὰ μὲν τὸ χρόνον κινεῖσθαι τε ἕκαστα καὶ εἶναι).

<sup>30</sup> DL 7.64, where a third account is added, which is perhaps less relevant here: 'an incomplete sayable attachable to a nominative case for generating a proposition'.

<sup>31</sup> . . . κατηγορήματα ὑπάρχειν λέγεται μόνα τὰ συμβεβηκότα, οἷον τὸ περιπατεῖν ὑπάρχει μοι ὅτε περιπατῶ, ὅτε δὲ κατακέκλιμαι ἢ κάθημαι οὐχ ὑπάρχει. Cf. SE M 8.100, the truth-conditions for indefinite propositions: καὶ δὴ τὸ ὠρισμένον τοῦτο ἀξίωμα, τὸ "οὗτος κάθηται" ἢ "οὗτος περιπατεῖ", τότε φασὶν ἀληθὲς ὑπάρχειν ὅταν τῷ ὑπὸ τὴν δεῖξιν πίπτοντι συμβεβηκή τὸ κατηγορήμα, οἷον τὸ καθεῖσθαι ἢ τὸ περιπατεῖν.



Whenever a predicate is actualized, it is so for a period of time,  $t_m-t_n$  (which, in accordance with Stoic continuum theory, can converge towards zero). The *same* predicate, 'to walk', can be actualized repeatedly, e.g. (at Theano) from 9 a.m. to 10 a.m. and again (at Theano) from 3 p.m. to 5 p.m. today. In this example, it would presumably also be actualized (at Theano) from 9.30 a.m. to 9.45 a.m., and from 4 p.m. to 5 p.m.<sup>32</sup>

We can now draw the connection between predicates and motions and qualified states as follows: whenever a predicate is actualized, one can discern an actualization of that predicate. So, in place of talking about a predicate's being actualized many times, one could talk about as many actualizations of the one predicate. Thus the various cases of walking are individuated, and what one arrives at are individual motions and qualitative states. For instance in the above example, we have an actualization of the predicate 'to walk' from 9 a.m. to 10 a.m., from 3 p.m. to 5 p.m., from 9.30 a.m. to 9.45 a.m., and from 4 p.m. to 5 p.m., i.e. four different actualizations. Each has a duration. The same holds for predicates that are concerned with qualitative states, e.g. 'to be alive', actualized at Socrates; there were in fact indefinitely many actualizations of that predicate at Socrates, during Socrates' lifetime.

Motions and qualitative states can thus be understood as a subclass of all actualizations of predicates: namely the subclass of those things that are *effects*.<sup>33</sup> For instance, in the above example of 'to walk', actualized at Theano, I specified four motions. And in the case of 'to be alive', actualized at Socrates, we had indefinitely many qualitative states. (All in accordance with Apollodorus' divisibility criterion, and granting that a motion within a motion can in principle be of a kind different from that of the original motion, see above.)

But is the actualization of a predicate a predicate? Asked in this way, the question presumably elicits the answer 'no'. But the phrase 'actualization of a predicate' was something I introduced, and I introduced it for reasons of explication. In fact, we can just as well say: the motion of Theano's walking from 4 p.m. to 5 p.m. is the predicate 'to walk' actualized (at Theano) from 4 p.m. to 5 p.m. Thus individual motions and qualitative states can also be understood as something like phases of predicates, more precisely, phases of predicates-while-they-are-actualized.

<sup>32</sup> If the time span becomes very small, perhaps no longer the predicate 'to walk' but some other predicate of change would be actualized at those times (at Theano), e.g. 'is moving her right leg forward'.

<sup>33</sup> What makes things that are effects actualized predicates is not the fact that they are caused. (There are for instance many predicates that are actualized, but are not caused, e.g. 'is a predicate', actualized at 'writes', and 'is not-walking', actualized at this book.) I hence assume that, although motions and qualitative states are effects, they are predicates independently of this. Still, the important point is that movements and qualitative states are unique among actualized predicates in that they are *directly* dependent on the active principle.

If we look at motions and qualitative states *qua effects*, we obtain similar results. The Stoics call effects ‘predicates’ (1.1.2). Effects, as they are dealt with by the Stoics in the context of determinism, are particulars.<sup>34</sup> Thus, effects, too, must be predicates actualized at something from  $t_m$  to  $t_n$ . And indeed it is testified, at least for Zeno, that effects are *συμβεβηκότα* (Stob. *Ecl.* I 138.15), that is actualized predicates. Thus motions *qua effects*, are motion *tokens*, not *types*; they obtain in the world during some time  $t_m$ – $t_n$ ; and the same holds for qualitative states.<sup>35</sup>

Since to every actualized predicate there corresponds at least one proposition (see below),<sup>36</sup> it is possible to sketch the relation between movements and qualitative states and propositions (*ᾄξιώματα*). For the Stoics, a proposition is a complete sayable that can be asserted, as far as itself is concerned (DL 7.65).<sup>37</sup> And at any one time a proposition is either true or false. As predicates can be actualized repeatedly, so (Stoic) propositions can be true or false repeatedly: they can change their truth-value. The Stoic concept of truth is thus temporalized, and in this respect their concept of proposition differs significantly from the prevalent modern concept, which works with an atemporal concept of truth. (This difference is of importance in the debate over determinism in various respects and will occupy us repeatedly in the following chapters.) The proposition ‘Theano is walking’ is true when Theano walks, false when it is not the case that Theano walks (cf. DL 7.65). In the above example, it would be true e.g. from 9 a.m. to 10 a.m. and from 3 p.m. to 5 p.m. For the Stoics, propositions are not only at any time either true or false, they also at any time either are actualized (subsist, *ὑπάρχειν*) or are not actualized—just as it was in the case of predicates. (Note that the same verb, *ὑπάρχειν*, is used as for the actualization of predicates.) A proposition is actualized (subsists) precisely when it is true.<sup>38</sup> In our example, the proposition ‘Theano is walking’ is actualized from 9 a.m. to 10 a.m. and 3 p.m. to 5 p.m., and I presume also from 9.30 a.m. to 9.45 a.m. It then becomes apparent that to every actualized predicate there corresponds at least one

<sup>34</sup> Stoic principles like ‘There is no motion without antecedent cause’ (see 1.3.3), in which motions are considered as what is caused, i.e. as effects, clearly deal with particular motions, or motion tokens; in this context effects thus are things that obtain at a certain time.

<sup>35</sup> This is not to deny that the Stoics ever talked about motions, qualitative states, and effects on a general level as well. On the contrary—it is likely that when the Stoics talked about general motions, qualitative states, or effects, they precisely took them to be predicates (*κατηγορήματα*).

<sup>36</sup> Cf. also Diogenes Laertius’ third Stoic account of ‘predicate’, above n. 30.

<sup>37</sup> For an exposition of the Stoic concept and definitions of proposition (*ᾄξιωμα*) cf. Bobzien 1999b, the section on *ᾄξιώματα*.

<sup>38</sup> ‘For according to them <i.e. the Stoics> true is that which subsists and is contradictory to something, and false is that which does not subsist and is contradictory to something.’, SE M 8.10 (*ἀληθές γάρ ἐστι κατ’ αὐτοὺς τὸ ὑπάρχον καὶ ἀντικείμενόν τινι, καὶ ψεῦδος τὸ μὴ ὑπάρχον καὶ [μὴ] ἀντικείμενόν τινι*).

actualized proposition: e.g. to the predicate 'to walk' actualized at Theano from  $t_m$  to  $t_n$  corresponds the proposition 'Theano is walking' actualized from  $t_m$  to  $t_n$ . (In fact, a whole set of propositions should correspond to this actualized predicate, including e.g.—with someone pointing at Theano—'This one is walking', and—assuming Theano is Dio's eldest daughter—'Dio's eldest daughter is walking', etc.)

Now, again, instead of a proposition's being actualized several times, we can talk about several actualizations of that one proposition. Thus to every actualization of a predicate there corresponds at least one actualization of a proposition, in the way determined above. And since motions and qualitative states are a subclass of the actualizations of predicates, there holds the same correspondence between them and actualizations of propositions. For instance, the actualization from 9 a.m. to 10 a.m. of the proposition 'Theano is walking' corresponds to the motion of Theano's walking from 9 a.m. to 10 a.m. I shall also call the actualizations of propositions 'facts'<sup>39</sup>—modelled on the concept of facts as states of affairs that obtain. But note that the Stoics have no ontological niche for states of affairs that do not obtain: actualized propositions subsist (*ὑπάρχει*), non-actualized propositions do not subsist (*οὐχ ὑπάρχει*).

To recapitulate: motions and qualitative states are effects; they have a duration; they are generally divisible, and are, if qualitative states, homogeneous or, if motions, either homogeneous or inhomogeneous; they can be conceived of as actualizations of predicates from  $t_m$  to  $t_n$  at some material object; and they have facts or actualizations of propositions from  $t_m$  to  $t_n$  correspond to them.

For the moment this may suffice on the Stoic notions of motion and qualitative states. There is another kind of 'entity' prevalent in the debate over Stoic determinism that needs to be introduced: this is 'that which happens or occurs' (*γιννόμενα*) or 'events', derived from the verb *γίγνεσθαι* (Latin *fieri*). It seems that in Stoic sources 'event' and 'motion' are often used interchangeably (e.g. Cic. *Fat.* 20; Alex. *Fat.* ch. 13).<sup>40</sup> However, *γιννόμενον* is equally used to cover both changes and qualitative states (e.g. Plut. *Stoic. rep.* 1049f–1050d), and I do not assume that it was a Stoic technical term that was ever defined by them, but that it was used differently in different contexts.

In the following I occasionally use the—artificial—term 'occurrent' in order to refer to Stoic qualitative states and motions indiscriminately, or

<sup>39</sup> To every actualization from  $t_m$  to  $t_n$  of a proposition  $p$  there corresponds a modern proposition ' $p$  from  $t_m$  to  $t_n$ ' that is true (with an atemporal concept of truth).

<sup>40</sup> The fact that 'event' does not suggest homogeneity, but 'motion' perhaps does, is not borne out by the sources.

to *γιννόμενα* in the wider sense where this expression includes qualitative states, or where it is uncertain whether it does.<sup>41</sup> Occurrents make up a subclass of all actualizations of predicates, namely those that are effects. To every occurrent correlates at least one actualized proposition or fact. But there are many facts to which no occurrents correlate. For instance, the actualization from  $t_m$  to  $t_n$  of 'is walking' at Theano is an occurrent and corresponds to the actualization of the proposition 'Theano is walking' from  $t_m$  to  $t_n$ , i.e. to a fact. On the other hand, the actualizations from  $t_m$  to  $t_n$  of 'Theano is not-walking' and of 'It is not the case that Theano is walking' are both facts, too; but neither corresponds to an occurrent. For neither corresponds to a motion or to a qualitative state.<sup>42</sup> In general, if the actualization from any  $t_x$  to  $t_y$  of a proposition ' $Fa$ ' corresponds to an occurrent, then no actualization from any  $t_x$  to  $t_y$  of the propositions 'It is not the case that  $Fa$ ' and 'non- $Fa$ ' corresponds to occurrents.

The Stoic concepts of *γιννόμενα*, motions, and qualitative states thus share elements of both modern concepts of facts and of modern concepts of events.<sup>43</sup> The above exposition is, however, not meant to represent a Stoic theory of occurrents, as they consciously developed it. I do not believe that the Stoics had any such worked-out theory. Rather, I have tried to make apparent several features of their concepts of motion, qualitative state, and 'event' which follow from other things we know they had a theory about: their concepts of causation, of effect, of proposition, of predicate, of actualized predicates, and of actualizations of propositions. As many modern philosophers build their theories without a fully worked-out theory of propositions, facts, and events, and indeed often mix up areas, so did the Stoics. The terms *γιννόμενον* and *κίνησις* are used differently in different contexts, and sometimes in the same context. Unclearities ensue, which often do not matter to what they say about determinism, but sometimes do. Accordingly, I occasionally, in the following chapters, simply duplicate the vagueness, using non-committal words like 'thing', without trying to clear up the Stoic mess.

<sup>41</sup> Here I put a term from Peter Simons to a use he did not intend.

<sup>42</sup> If anything, those two actualizations of propositions correspond to the absence of a movement of Theano's (*ἀκίνησία*, see above, p. 22), with the difference between the two that the first, but not the second, presupposes the existence of Theano.

<sup>43</sup> The correspondence between effects and predicates that are actualized (from  $t_m$  to  $t_n$  at some body) suggests a concept of effect that is closer to modern concepts of fact than to modern concepts of events. That is, if one applies a criterion for facts of the 'what you see is what you get' type, e.g. the effect 'walking' actualized at Theano's from  $t_m$  to  $t_n$  comes out on the fact side: it is not part of the effect that her walking is rather fast walking, that she wiggles her hips, etc. The same holds for the Stoic concept of movement (*κίνησις*), if one makes the plausible assumption that movements, since they are the things of which the Stoics say that they are caused, are effects.

## 1.2 TELEOLOGICAL DETERMINISM DEFINED

The only surviving passages in which Chrysippus systematically sets out and justifies his determinism are a number of quotes from his first book *On Nature*, preserved in Plutarch's *On Stoic Self-contradictions*. This sequence of short passages mentions neither fate nor causation, but it shows how Chrysippus' determinism grows out of the basic assumptions of Stoic cosmology and is thus firmly anchored in early Stoic physics. Here are first the passages:<sup>44</sup>

(1) . . . in his first book *On Nature* he said this: Since the organization of the universe proceeds in this way, it is necessarily in accordance with this organization that we are in whatever qualitative state we may be, whether contrary to our individual nature we are ill or maimed or have become grammarians or musicians. (*Stoic. rep.* 1049f–1050a)

(2) We shall on this principle state similar things both about our virtue and about our vice and generally about skills and the lack of skills as I have said. (*Stoic. rep.* 1050a)

(3) For no particular thing, not even the smallest, can have happened otherwise than in accordance with the common nature and its reason. (*Stoic. rep.* 1050a)

(3a) . . . that nothing at all, not even the smallest, is in a qualitative state or moves otherwise than in accordance with the reason of Zeus, which is the same as fate. (*Stoic. rep.* 1056c)<sup>45</sup>

(4) For since the common nature stretches into all things, it must be the case that everything that happens in any way whatsoever in the universe and in any of its parts will have happened in accordance with that nature and its reason in unimpeded sequence; for neither is there anything to obstruct the organization from outside nor can any of its parts move or be in any qualitative state except in accordance with the common nature. (*Stoic. rep.* 1050c)

(5) . . . everywhere, but mainly in his physical books he has written: that there happen many obstacles and impediments for particular natures and (their) motions but none for the nature of the universe.<sup>46</sup> (*Stoic. rep.* 1056d)

<sup>44</sup> The context in Plutarch is this: Plutarch wants to show up a self-contradiction between Chrysippus' statement that god is not co-responsible for anything bad or shameful (*αἰσχροπός*) on the one hand (*Stoic. rep.* 1049d–e), and that god is responsible for the bad things in the world on the other (*Stoic. rep.* 1049f–1050d). That is, he invokes one of the standard problems of providence. Accordingly, Plutarch has selected the present passages from Chrysippus' oeuvre to back up his point that Chrysippus maintains that god is responsible for the bad things in the world.

<sup>45</sup> Cf. also (3b): ' . . . that not even the smallest of his (i.e. god's) parts can be otherwise than in accordance with the will of Zeus but that every ensouled thing is naturally in the qualitative state and moves as he directs it and as he turns it about, and holds and arranges it . . . ' (Plut. *Comm. not.* 1076e).

<sup>46</sup> (1) . . . ἐν τῷ πρώτῳ περὶ Φύσεως ταῦτ' εἴρηκεν· οὕτω δὲ τῆς τῶν ὅλων οἰκονομίας προαγούσης, ἀναγκαῖον κατὰ ταύτην, ὥς ἂν ποτ' ἔχωμεν, ἔχειν ἡμᾶς, εἴτε παρὰ φύσιν τὴν ἰδίαν νοσοῦντες, εἴτε πεπηρωμένοι, εἴτε γραμματικοὶ γεγονότες ἢ μουσικοί.

(2) Κατὰ τοῦτον δὲ τὸν λόγον τὰ παραπλήσια ἐροῦμεν καὶ περὶ τῆς ἀρετῆς ἡμῶν καὶ περὶ τῆς κακίας, καὶ τὸ ὅλον τῶν τεχνῶν καὶ τῶν ἀτεχνῶν, ὥς ἔφην.

In Chrysippus' book *On Nature*, the first four bits, (1) to (4), which are all introduced by Plutarch as quotations, may well have formed a more or less continuous text. (5) is a separate passage, but it fits in with the same overall topic. All five passages (and the two parallels (3a), (3b)) appear to be part of one argumentative context. The thesis Chrysippus wants to back up is that every motion and every qualitative state of any object is in accordance with the common nature, i.e. the common nature of the whole world.<sup>47</sup> The distinction between global and innerworldly perspective is essential for Chrysippus' reasoning, and is manifested in his distinction between common and individual nature.

The common nature is the same as the active principle or god (3a), (3b).<sup>48</sup> This universal nature extends into all things (4).<sup>49</sup> It is responsible for the organization of the universe as a whole (4), (1), (3b), and it is unhindered (4).<sup>50</sup>

On the intra-cosmic level things appear naturally more complex. All objects in the world have their individual natures (1), and these go together with qualitative states and movements, which are in accordance with the object's individual nature; e.g. to be in a state of health and wholeness (unmaimed), and to move in accordance with reason (Galen, *PHP* 4.2.12, quoting from Chrysippus) are qualitative states and movements in accordance with nature for human beings.

But there are also counter-natural movements and qualitative states, i.e. those contrary to an object's individual nature: being ill or maimed are examples for states (1), bodily movements that go beyond a person's impulse (*ὁρμή*) for movements (Galen, *PHP* 4.2.16–18, quoting from Chrysippus); and we can deduce from (1) that there are movements of an object that are externally forced, like being maimed.

(3) Οὐδὲν γὰρ ἔστιν ἄλλως τῶν κατὰ μέρος γενέσθαι οὐδὲ τοῦλάχιστον, ἢ κατὰ τὴν κοινὴν φύσιν καὶ κατὰ τὸν ἐκείνης λόγον.

(3a) . . . μηδὲ ἴσχεσθαι μηδὲ κινεῖσθαι μηδὲ τοῦλάχιστον ἄλλως ἢ κατὰ τὸν τοῦ Διὸς λόγον, ὃν τῇ εἰμαρμένῃ τὸν αὐτὸν εἶναι.

(4) Τῆς γὰρ κοινῆς φύσεως εἰς πάντα διατεινούσης, δεήσει πᾶν τὸ ὅπωςοῦν γινόμενον ἐν τῷ ὅλῳ καὶ τῶν μορίων ὁπωσοῦν κατ' ἐκείνην γενέσθαι καὶ τὸν ἐκείνης λόγον κατὰ τὸ ἐξῆς ἀκωλύτως· διὰ τὸ μήτ' ἐξωθεν εἶναι τὸ ἐνστησόμενον τῇ οἰκονομίᾳ, μήτε τῶν μερῶν μηδὲν ἔχειν ὅπως κινήσεται ἢ σχήσει ἄλλως <ἢ>\* κατὰ τὴν κοινὴν φύσιν.

(5) . . . πανταχοῦ, μᾶλλον δ' ἐν πᾶσι τοῖς Φυσικοῖς γέγραφε ταῖς μὲν κατὰ μέρος φύσεσι καὶ κινήσεσιν ἐνστήματα πολλὰ γίνεσθαι καὶ κωλύματα, τῇ δὲ τῶν ὅλων μηδέν.

\* The insertion of *η* is justified by its occurrence in the parallel passages (3), (3a), and (3b).

<sup>47</sup> Cf. Philod. *Piet.* c.4.31–5.1 (Henrichs, i.e. c.11.31–12.1 *DD* 545); Cic. *Nat. deor.* I 39.

<sup>48</sup> Cf. Philod. loc. cit., Cic. loc. cit.

<sup>49</sup> The same verb, 'to extend' (*διατείνειν*) is used to describe how the pneuma of the soul stretches through an animal's body, e.g. Stob. *Ecl.* I 368.12–16, [Plut.] *Epit.* 4.21.3 (*DD* 411); cf. also *DL* 7.138.

<sup>50</sup> Later reverberations of this idea can be found in Marcus Aurelius, 8.7.

Counter-natural states can be the result of counter-natural movements. But they can also be frustrated natural movements: a tree's growing can be prevented by other trees, or a roof, that are 'in the way'. That is, on the innerworldly level there can be impediments that interfere with the natural (and also with counter-natural) movements of individual objects. An impediment is external to the object (or part of object) whose movement is prevented. Movements and qualitative states that are not natural have the reason of their occurrence in the fact that there is a multitude of objects in the world and that they can get in each other's way, when performing their natural movements. Both counter-natural movements (i.e. movements by force) and counter-natural states (prevention of an object's natural movements or results of counter-natural movements of an object) are, it seems, the result of such clashes. The interplay of the objects leads to the result that one object—in moving naturally—hinders another from moving or from being in a certain state; and one object can by force move another object, or change the state it is in, or even destroy it.

Chrysippus' reasoning in his first book *On Nature* is thus based on the relation between cosmic and intra-cosmic perspective. His thesis, to repeat it here, is that 'every qualitative state and every motion in the world is in accordance with the universal nature'. And our passages suggest that Chrysippus put forward the following two reasons to back up this thesis:

First, nothing can obstruct or destroy the organization of the universe from outside, for the simple reason that there is nothing (no thing) outside of the universe—only the void. The natural movement of the universe as a whole can thus not be thwarted.<sup>51</sup> (Why can the impediments on the level of individual objects not be regarded as obstacles to the nature of the universe? This is Plutarch's criticism in *Stoic. rep.* 1056d. We should expect Chrysippus' reply to be (a) that the common nature extends into all these obstacles, too; (b) that all obstruction can in the end be reduced to natural movements of *some* things (that are part of the world); and (c) an element of teleology, *viz.* that these obstructions lead to the realization of the best possible world.)

Second, nothing in the world can be in a qualitative state or move otherwise than in accordance with the universal nature, since the universal nature is 'all-embracing': it includes the individual natures, in that it extends into the individual objects, making up their individual nature (4). Although it would make sense, say, that my individual nature goes against yours, it makes no sense to say that my individual nature goes

<sup>51</sup> Cf. also Cic. *Nat. deor.* 2.37–8 for this point. We may have a further parallel in a short papyrus fragment from Chrysippus' *On Providence* (Gercke, 1885, 711, fr V, also printed in Ferrario 1972, 81).

against the universal nature, for my individual nature is part of the one universal nature.<sup>52</sup>

Taking the two reasons together, we can see that the thesis that every state and motion is in accordance with the one universal nature (and its organization) is a consequence of the Stoic conception of the world as a unity which is held together by the one active principle. The teleological aspect of the active principle is taken into account in our passage by the references to the organization of the world (1), (4) and to the reason of the universal nature (3), (4).<sup>53</sup>

There can be little doubt that Chrysippus proclaims some sort of universal determinism in these passages from his first book *On Nature*. This is particularly clear from formulations like

- (1) . . . it is necessarily in accordance with this organization that we are in whatever qualitative state we may be . . .
- (3a) . . . that nothing at all, not even the smallest, is in a qualitative state or moves otherwise than in accordance with the reason of Zeus . . .
- (4) . . . it must be the case that everything that happens in any way whatsoever in the universe and in any of its parts will have happened in accordance with that nature and its reason . . .

The texts suggest that the universal nature leaves no room for alternative developments of the world. There is exactly one course of events (and states) that is in accordance with the rational universal nature, and that is the course of events (and states) which is the actual one. But what sort of determinism is this?

- (i) As to its scope, it is universal: first, emphasized repeatedly, motions and qualitative states are equally determined (by the rational universal nature). Second, every qualitative state and every movement is included. Given that Stoic physics is a continuum theory, movements and qualitative states can be indefinitely small (1.1.1 and 1.1.3); but however small, they are included in the universal nature. There is no room for quantum leaps; nor is the common nature concerned with the 'weighty' changes and states only. Some—presumably later—Stoics illustrated this point with raising one's eyebrow, stretching out one's finger, or turning one's head as examples for small, trifling movements that are predetermined none the less (Alex. *Fat.* 175.6–13).

<sup>52</sup> What about the passive principle, matter ( $\psi\lambda\eta$ )? In the same first book *On Nature* Chrysippus applies the same distinction of global and innerworldly perspective to it, too. Whereas the matter of the individual things both increases and decreases, as result of the workings of the active principle, the matter of the whole world remains constant (DL 7.150; Stob. *Ecl.* I 133.6–11).

<sup>53</sup> For the rational element of the active principle see also below 1.4.



- (ii) The world, as it is determined, is not chaotic, or like something produced by a random generator. Rather, it is an ordered and organized whole (1), (4).
- (iii) This organized whole has not evolved randomly ('order from chaos'), but its development follows a rational principle of organization: the reason of Nature or Zeus (3), (3*a*), (4).
- (iv) This rational organizing principle works completely immanent to the world, and also from the inside of each individual object.
- (v) There is no universal innerworldly harmony such that every object can realize its individual nature unhindered and unforced. Rather, the rational organizing principle seems to work like this: the individual nature in each object provides the object with its characteristic qualities and activities, which in favourable circumstances it will display and perform. However, it is not the case that all objects realize their individual nature in all aspects. Rather, some objects prevent others from performing their natural movements, and some objects force others to perform certain counter-natural movements. The world is such that the objects are, as it were, left to battle the conflicts out between themselves. Yet—from the cosmic perspective—the way this happens does not include any element of chance; for it is in accordance with the reason of the world, which works from the inside of these objects.
- (vi) Chrysippus expressly mentions our virtues and vices (together with skills in general and lack thereof) as among the qualitative states that cannot be in any other way than they are (1), (2), and there is no hint that he considered this point problematic or disturbing. Virtues and vices, being dispositions (*διαθέσεις*), are part of the portion of active principle in us.

This picture of universal determinism is far removed from modern theories of mechanical, causal determinism, in particular on two counts; first, the overall picture is strictly teleological: there is a rational organization of the world (*οἰκονομία, λόγος*), and every state and movement conforms to this rational organizing principle. Second, causation is not mentioned in any of the passages, nor is there any idea of empirically detectable regularity and individual laws of nature governing all events. The changes in the world—like the qualitative states—are defined in terms of the natural motions and states of the objects in the world, and of the counter-natural motions and obstructions that are the consequence of many different objects 'trying' to realize their natural movements. What makes an object move naturally is primarily the active principle in that object, although (as we will see later) such movements always presuppose some external stimulus.

Of course it is possible to express the Stoic theory in terms of 'laws of nature': but these would be laws concerning the individual natures of individual objects. They would have the form: an object with the individual nature *n* will perform movements of type *m* as long as the circumstances are favourable, i.e. as long as it is (appropriately prompted and) not prevented by external circumstances from doing so. Such 'laws of individual natures' connect objects with certain qualities with certain movements, in line with *Stoic* theory of causation.<sup>54</sup> They are, however, not suitable to define determinism—not so much because they do not connect events with events, but rather since they do not take into account the circumstances in which the objects find themselves, and since they do account for natural motions only. Precise prediction of the future on the basis of such laws, even if one knows them all, is not possible. But it would be mistaken to infer from this that Chrysippus' determinism was *not* a causal determinism in which efficient causes play a central role. In order to see how Stoic determinism and Stoic theory of causation fit together, we have to turn to another passage in Plutarch.

### 1.3 CAUSAL DETERMINISM DEFINED

Stoic physics stands out in antiquity not so much because it is a deterministic system, but because it contains a worked out theory of universal causal determinism. No early Stoic exposition of this theory has survived, but another passage in Plutarch's *On Stoic Self-contradiction* (ch. 23, 1045b–d) gives us the basic information we need. The passage is a summary from a Chrysippean work, which consists of an argument by some opponents of the Stoics, and Chrysippus' reply. For an understanding of how Chrysippus argued for full causal determination of all motions, a brief analysis of the opponents' argument and Chrysippus' reply is needed first.<sup>55</sup>

<sup>54</sup> But it is unlikely that the Stoics themselves thought of laws of such a kind as governing the natural movements, or that they would take recourse to such laws for explaining such movements. Rather, the rational pneuma in every natural object will have been thought to contain the relevant 'information', embodied in the specific state of tension of their pneuma, and this will make the object perform its natural movements, if prompted. The regularity results from the fact that natural objects of a certain kind all have the same kind of 'information' stored in their pneuma.

<sup>55</sup> The overall structure of ch. 23 is paradigmatic for *On Stoic Self-contradiction*: Plutarch adduces a Chrysippean argument in which the latter is assumed to make a statement *p* (in this case the assertion that there are no uncaused motions) (1045b–c); he then adds a piece of Chrysippean theory in which the latter is assumed to deny *p* or to make a statement not-*p*, or a statement that entails not-*p* (1045d–f), and he ends with explicitly pointing out the contradiction (1045f). Unusually for *On Stoic Self-contradiction*, Chrysippus is named as source for 1045b–d, but no book title is given. However, Plutarch mentions twice that what he reports has been brought forward by Chrysippus many times (1045c, c–d), and there is no reason to doubt Plutarch's credibility in this respect.

1.3.1 *The anti-Stoic argument for spontaneous motions*

Here is the opponent's argument:

(1) Some philosophers, believing that they bring about release for the impulses from being forced by external causes, (2) construct in the ruling faculty of the soul some adventitious motion (3) which becomes evident best in the case of indistinguishables. (5) For when it is necessary to take one of two things, (4) when the two are of equal power and are in the same state, (6) <and> when no cause leads to either of them, (7) since it in no way differs from the other, (8) <then> the power of spontaneity itself in the soul, by taking from itself an inclination, (9) cuts through the puzzle.<sup>56</sup> (*Stoic. rep.* 1045b–c)

There is an ongoing controversy about which philosopher or philosophical school advanced this argument: Epicurus or some Epicureans, some Academics, and the Stoic Aristo of Chios have been suggested. For my present purposes this question is of minor relevance.<sup>57</sup>

The goal of the argument, it appears, is to show that the impulses in the human soul which lead to action (*όρμαί*)<sup>58</sup> are not, or are not always, forced by external causes (1). From this we can hazard a guess about the original context of the argument and Chrysippus' reply. The absence of *external force* in the production of those intra-psychic events that lead to action was generally regarded as necessary for the attribution of responsibility to the agent. External necessitation of the impulse was usually contrasted with the impulse's depending on us (being *ἐφ' ἡμῶν*). Thus the opponents presumably wanted to release the impulses from external force, so that the agent could be held responsible for them and the ensuing actions. The argument then appears to belong in the context of the debate over determinism and responsibility, which was mainly concerned with the motions in the soul. It belongs to psychology and philosophy of mind—not to general physics. It is meant to secure a supposedly necessary condition for the agent's responsibility. (Discussion of this problem in Stoic philosophy is documented elsewhere, and I deal with it in Chapter 6, where the present passage will make a brief reoccurrence in 6.3.4.1.)

The specific solution the philosophers proffer is to establish the existence of some 'spontaneous' motion and a corresponding power in the mind

<sup>56</sup> (1) Τοῦ κατηναγκάσθαι δοκοῦντες ὑπὸ τῶν ἔξωθεν αἰτιῶν ταῖς ὁρμαῖς ἀπόλυσιν πορίζειν (2) ἔνιοι τῶν φιλοσόφων ἐπελευστικὴν τινα κίνησιν ἐν τῷ ἡγεμονικῷ κατασκευάζουσιν, (3) ἐπὶ τῶν ἀπαράλλακτων μάλιστα γινομένην ἔκδηλον· (4) ὅταν γὰρ δυοῖν ἴσον δυναμένων καὶ ὁμοίως ἐχόντων (5) θάτερον ἢ λαβεῖν ἀνάγκη, (6) μηδεμιᾶς αἰτίας ἐπὶ θάτερον ἀγούσης (7) τῷ μηδὲν τοῦ ἐτέρου διαφέρειν, (8) ἢ ἐπελευστικὴ δύναμις αὐτῇ τῆς ψυχῆς ἐπικλίσιν ἐξ αὐτῆς λαβοῦσα (9) δέκοψε τὴν ἀπορίαν.

<sup>57</sup> See e.g. Cherniss 1976, 508–9, Englert 1987, 188–9, Long/Sedley 1987, 339, Boys-Stones 1996. Regarding the problem the passage is concerned with, I believe that it is the problem stated in its first sentence (1). Cf. also below, 6.3.4.1.

<sup>58</sup> Roughly intentions; see 6.1.2 for details.

(2). Such a motion is apparently thought to warrant the independence of the agent's impulses from external causes. Here is a rough analysis of the argument, brushing over various difficulties it raises.

The philosophers try to justify the existence of spontaneous motions (and of the respective power) by singling out a subclass of the situations in which such movements are assumed to occur and in which their introduction appears most plausible. These are situations in which the agent encounters some indistinguishable alternatives (3). Our passage is not very helpful on what these 'indistinguishables' (*ἀπαράλλακτα*) are. But it is clear that situations of indistinguishables are a kind of situations in which one has the choice between two things.<sup>59</sup>

We learn of two independent conditions for indistinguishables: first, concerning their indistinguishability, the two things are of equal value or power (4), are in the same, or a comparable, state (4), and differ in nothing from each other (7). Second, for the person who has the choice it is necessary to take one of the alternatives (5). The text is ambiguous both with respect to what the similarity of the options consists in, and in which sense it is necessary for the agent to choose. I take it that the situations at issue are those in which (i) both alternatives are equal in all relevant respects, including equal desirability to the agent, (ii) either of them is more desirable than all the remaining possible courses of action, and (iii) the agent as a matter of fact goes for one of the alternatives. The argument presupposes that situations which fulfil all three conditions can actually occur.<sup>60</sup>

The original structure of the argumentation—if there is any—is found crammed into the second sentence (5)–(9) (again, I pass over various ambiguities): the philosophers make the assumption that if two alternatives are indistinguishable, then no (external) cause will lead the faculty of impulse to either (7), (6). They presuppose further that at least in some situations an impulse and an action ensue. From these two assumptions it seems to have been inferred that in the cases in question impulse and action occur without having an external cause. The power of spontaneous motion in the mind is thus introduced to *explain* how the agent's predicament was solved (9). This power takes from itself (*ἐξ αὐτῆς*, i.e.

<sup>59</sup> It is uncertain, from the text, whether the choice is between objects or courses of action. The use of the verb 'to take' (7) suggests objects. In any event, the difference is not really of importance. For in the context of the argument to choose an object is to choose to take that object, and that is to choose a particular course of action.

<sup>60</sup> For example it has to be precluded that the course of action taken is *defined* as the most desirable option since this would obstruct (i); and it has to be ruled out that (i) and (ii) together entail 'stalemate paralysis' (as it is assumed in the very similar cases which are discussed under the name of 'Buridan's ass', see e.g. Sorabji 1988, 149 ff.), since this would obstruct (iii).

not from outside) an inclination for one of the two alternatives. What sort of power this is we are not told. We should expect that it was thought to become active in the situations of indistinguishables, and presumably in all situations where the agent is to be held responsible (cf. also 6.3.4.1).

Note that the argument neither states nor entails motion without a cause (with the Hellenistic concept of corporeal causes) and *a fortiori* not the existence of chance. This is confirmed by Plutarch's presentation of Chrysippus as accusing the philosophers of introducing uncaused motions, which suggests they did not explicitly assert their existence. The passage, especially (8), rather propagates some kind of 'agent-causality', based on a self-moving force in the agent's soul. The spontaneous motion (*ἐπελευστική κίνησις*) is introduced not as causally undetermined, but as 'un-predetermined'.

### 1.3.2 *Chrysippus' reply*

Plutarch summarizes Chrysippus' reply thus:

(1) Chrysippus, speaking against these, (2) as people who violate nature through the uncaused, (3) adduces in many places the die and the scales and many of the things that cannot take now one fall or inclination, now another (4) without there occurring some cause and difference, either concerning just the things themselves or concerning the external circumstances; (5) for, he thinks, the uncaused is completely non-existent, and so is self-motion, (6) and in the case of these things which some people invent and name 'spontaneous', (7) concealed causes sneak in and, (8) without our noticing it, they lead the impulse to one of the two alternatives.<sup>61</sup> (*Stoic. rep.* 1045c.)

Chrysippus proceeds as follows: first he states that the introduction of the power of spontaneous movement amounts to the introduction of uncaused motion (1), (2). Then he gives an alternative explanation of what happens in the situations of indistinguishables (3)–(8). Presumably since the intra-psychical events are not open to direct investigation, instead of a direct account, he presents an analogy from 'everyday physics' to the situations of indistinguishables.<sup>62</sup>

The dice (or knucklebones) and scales analogy is given in such a compressed form that it cannot be fully restored. But on the assumption that the die and scales were employed to illustrate cases of indistinguishables,

<sup>61</sup> (1) πρὸς τούτους ὁ Χρύσιππος ἀντιλέγων, (2) ὡς βιαζομένους τῷ ἀναιτίῳ τὴν φύσιν, (3) ἐν πολλοῖς παρατίθησι τὸν ἀστράγαλον καὶ τὸν ζυγὸν καὶ πολλὰ τῶν μὴ δυναμένων ἄλλοτ' ἄλλας λαμβάνειν πτώσεις καὶ ροπὰς (4) ἄνευ τινὸς αἰτίας καὶ διαφορᾶς ἢ περὶ αὐτὰ πάντως ἢ περὶ τὰ ἔξωθεν γινομένης· (5) τὸ γὰρ ἀναιτίον ὅλως ἀνύπαρκτον εἶναι καὶ τὸ αὐτόματον, (6) ἐν δὲ ταῖς πλαττομέναις ὑπ' ἐνίων καὶ λεγομέναις ταύταις ἐπελεύσεσιν (7) αἰτίας ἀδήλους ὑποτρέχειν (8) καὶ λανθάνειν ἡμᾶς ἐπὶ θάτερα τὴν ὁρμὴν ἀγούσας.

<sup>62</sup> Chrysippus used this method repeatedly, see 6.3.3.

the text enables us to secure a few general points about the situations at issue in the analogy:

- The analogon looks at the same object (a die, a pair of scales), or at two objects of the same type that seem identical, in two spatio-temporally distinct situations.
- In these two situations the object (or the two objects of the same type) reacts in noticeably different ways.
- The reactions are characteristic movements of the objects at issue: falling on one of its sides, in the case of the dice; inclining to one side, in the case of the scales.
- From the fact that the situations are meant to be in some way analogous to those of the indistinguishables, we can infer that in each case the two starting situations must at least *prima facie* look indistinguishable in all relevant respects. (For example, a die, thrown twice, under seemingly identical circumstances, comes once up with one side, then with another.)

Chrysippus then explains what is really going on in these cases: the two seemingly indistinguishable starting situations are in fact not completely the same: there is a difference either in the object (die, scales) or in the surroundings, which is responsible for the difference in the outcome (3)–(4). And—given the assumption was that the situations appear alike in all relevant aspects—this difference must be hidden to the observer. Thus Chrysippus clearly acknowledged the fact that tiny variations in the antecedent situation can lead to—comparatively—huge changes in the outcome.

Since Chrysippus intends to argue by analogy, we can assume that he thought that his audience would accept that there are such unnoticeable differences present in the case of dice and scales. For only then can the analogon be used to elucidate Chrysippus' explanation of what happens in the human mind in the situations of indistinguishables.

Chrysippus draws the analogy in (6)–(8): as in the case of dice and scales, so in the case of indistinguishables, the reactions are neither uncaused nor spontaneous; rather there are factors concealed from us which are responsible for the agent's impulse to go for one and not the other alternative. In parallel with the case of the dice and scales these hidden factors should be either in the person's mind or in the surroundings. We can assume Chrysippus to have concluded that hence the so-called indistinguishable alternatives do not prove the existence of spontaneous—and thus uncaused—self-motion. So far Chrysippus' reply.

A comparison between the two arguments shows that the controversy between Chrysippus and his opponents is at base metaphysical: the opponents, starting from the premises that there is no difference in

the antecedent data and that one option is actually chosen, conclude that there is some sort of spontaneous 'self-movement'. Chrysippus, starting from the premises that there is no uncaused motion (and that spontaneous self-motion implies uncaused motion) and that one option is chosen, concludes that the opponents' assumption of ontological indistinguishability in the antecedent data is false; there are, in fact, differences, only that they are not noticed—the indistinguishability is merely epistemic. Chrysippus thus rightly rejects the validity of the step from epistemic to ontological indistinguishability. But he in turn can conclude that there always is a hidden difference, only by virtue of his assumption that there are no uncaused motions. And this assumption is as metaphysical as the one that there are ontologically indistinguishable situations.

### 1.3.3 *Causal determinism*

Up to now, I have deliberately left out any reference to causation in the analysis of Chrysippus' argument. For there is a difficulty in the text when one tries to bring it into accord with the Stoic concept of cause. We know (from elsewhere) that the causal factors responsible for the movements in the case of the dice would be the person throwing the die and the nature (i.e. shape, etc.) of the die.<sup>63</sup> But Chrysippus, in his explanation of the analogon, says there is a difference either in the object (the die) or in the surroundings (which should include more than just the person who throws the die). This means that—in Stoic terminology—there is not necessarily a difference *in the causes*. There is a difference somewhere in the overall situation—perhaps in the causal factors, perhaps in the mere circumstances. And this difference explains the difference in outcome, whether or not it is causal in the Stoic sense.

This point has consequences for how one has to read the Plutarch passage. The phrase 'the die . . . cannot take now one fall . . . now another without there occurring some cause and difference, either concerning entirely the things themselves or concerning the external circumstances' (3)–(4) hence cannot be understood as 'there is a difference in causes responsible for the difference in outcome'. Instead it has to be read either as 'not without some reason, i.e. some difference in' or as '(i) not without cause (for the person and nature of die *are* causes of the movement either time); and (ii) not without a difference (for there *is* a difference in either the causes or the circumstances)'. Chrysippus then reasoned like this: If there were a spontaneous motion, then the uncaused would exist. But the uncaused does not exist. Take situations of dice, scales, etc.: there *are* causes that bring about every one of their movements; and if there

<sup>63</sup> Cf. 6.3.2 and 6.3.3 for details.

are different outcomes in comparable situations, this is due to a difference either in those causes or in the surroundings—even if we cannot detect them.

At the point where Chrysippus draws the analogy, however, I assume he talks about causes proper: ‘and in the case of these things which some people invent and name “spontaneous”, concealed causes sneak in.’ (6)–(7). This is so, because the situation of indistinguishables is assumed to leave the agent in a stalemate, i.e. inactive, if there is neither a difference in overall situation, nor a spontaneous motion (see 1.3.1). Thus, even with the Stoic concept of causation, in order for something to *happen* in such situations, there must be an active *causal* factor involved—whichever way the agent decides.

So far the textual difficulty. What does the argument tell us about Chrysippus’ determinism? The Plutarch passages discussed earlier in 1.2 outlined a deterministic theory, but left it open in which way the determination was envisaged; in particular, it said nothing about *causal* determination. The present passage on the other hand allows us to extract two different types of principles of universal causality which were part of Chrysippus’ theory.

First, Chrysippus assumes a principle ‘the uncaused and the self-moved are non-existent’. Variations of this principle are recorded for Chrysippus elsewhere. Galen, for instance, reports:

For in this way they <i.e. Chrysippus and his adherents> would concede some uncaused motion, something they commend us to beware of, and they reproach Epicurus for assuming some such thing. If, then, nothing happens without a cause . . . (PHP 4.4.35–6)

Equally Cicero reports that Chrysippus maintained that there is ‘no motion without cause’ (*Fat.* 20) and that ‘nothing can happen without a cause’ (*Div.* II 61). This principle is, in the first instance, about motions or events; it links corporeal objects (the causes) with motions (*κινήσεις*). (The formulation in Plutarch does not mention motion, but the whole argument is about the motions of the soul.) I call it the ‘General Principle of Causality’ or ‘General Causal Principle’:

(GCP)     Nothing happens without a cause.

In Cicero we learn that Chrysippus backed up this principle with the Principle of Bivalence (see 2.1.1.1). Here, in Plutarch, it seems to be backed up by the idea that uncaused motion would violate nature (2).<sup>64</sup>

<sup>64</sup> The same point is recorded for some later Stoics whom Alexander reports as holding that ‘nothing in the world can be the case or happen without a cause’ (*Fat.* 192.8–9), and that an uncaused motion would, as it were, explode the universe and destroy its unity (*Fat.* 192.11–15).



Now, as long as the General Causal Principle is not further specified, it does not, within Stoic philosophy, entail determinism. For in Stoic philosophy causes are not events, but bodies, considered in relation to the motion they bring about (1.1.2). Thus the principle does not preclude that a motion is not fully determined by its causes. Nor does it rule out that in relevantly similar situations, an object is once the cause of one kind of motion, once of another. That is, it is not ruled out that there is an element of spontaneity *in the* (thing that is the) *cause*—as seems indeed to have been suggested by Chrysippus' opponents in our Plutarch passage. The General Causal Principle does not guarantee universal regularity or uniformity between cause and effect. But such uniformity is the hallmark of most modern theories of causal determinism.

This lack of specification cannot be made up for by the fact that we have determinism of some kind secured for Chrysippus by the other Plutarch passages from Chrysippus' *On Nature* (cf. 1.2). For it does not follow that, if we bring them together with Chrysippus' General Causal Principle, we obtain universal *causal* determinism.

In order to show that Chrysippus' determinism was universal *causal* determinism, we need to show that he held another kind of physical principle. And we find such a principle underlying our present Plutarch passage. The kind of principle I have in mind belongs to the family described by catch-phrases such as 'same causes, same effects' and 'like causes, like effects'. I dub such principles 'specified causal principles'. We are nowadays all familiar with this type of principles, and indeed many consider them as trivial. However, this 'triviality' is based on the fact that in everyday life we have absorbed a certain physical world view, thinking of causes and effects as events, and as governed by 'laws of nature', which somehow connect types of causes and types of effects. And we seem to hang on to this kind of idea of the world fairly undisturbed by the fact that it has little to do with modern physics—or philosophy of causation for that matter. However, this world view has not always been the prevalent one. The idea of such a specified causal principle had to be 'detected' or 'invented' first; and evidently, with a concept of cause as corporeal, any version of such a principle will have to look different from the modern ones.

After these preliminary remarks, let us return to Chrysippus' reply to the proponents of spontaneous motions. It is plain that he maintains the General Causal Principle in his reply (5). But how is a specified causal principle involved in his reasoning?

One way of understanding specified causal principles of the kind 'like causes, like effects' or 'same causes, same effects' is that they imply the existence of a plurality of particular empirical causal laws which state some universal regularities, and which allow us to say something like 'effect *e*

happened *because* cause *c* preceded', based on reasoning of the kind '*ceteris paribus*, whenever a cause of type *C*, then an effect of type *E*'; hence in this case *e* (which is of type *E*) followed, since *c* (which is of type *C*) preceded, and *cetera paria*.' But this is not what we find for Chrysippus.

In our passage, what Chrysippus *intends to show* is that in the case of any *one* movement (including those in situations of indistinguishables) causes and circumstances together determine the movement in any detail. To show this, he argues by analogy from *two (or more)* similar movements. The analogy makes use of the following type of situation: We have two sections of the spatio-temporal universe, each consisting of a starting situation *s* which includes an object *o*, and a subsequent movement of *o*, which ends in a resultant state *r*. The two starting situations, as far as they are considered pertinent to the movements, are epistemically indistinguishable, but temporally and/or spatially distinct. The subsequent movements, however, differ from each other in that they lead to noticeably dissimilar resultant states. Chrysippus infers from this—and takes his audience to agree with him—that the two epistemically indistinguishable starting situations are in fact ontologically distinct (cf. 1.3.2).

So here it looks as if Chrysippus has some kind of Specified Causal Principle on the side of the analogon, roughly 'difference in effects, difference in overall starting situations'. Or more precisely

(SCP<sub>-analogue</sub>)    When from two seemingly indistinguishable starting situations two different effects ensue, then these situations were ontologically distinct: either in the object or in the surroundings there was a factor that differed.

This looks like the converse of the principle 'like causes, like effects'. In fact, it is contraposed to 'no difference in starting situations, no difference in effect'. Why has Chrysippus the *converse* of what we usually find? The answer could be that when formulating the principle in contraposition, starting with the *effects* in the antecedent, as is implied by our text, Chrysippus conveniently bypasses the difficulty of having to determine what is relevant to the starting position. For in the form beginning with the starting situation, a notorious difficulty is to determine what counts as part of the starting situation: First, the factors can be indefinitely many, owing to the Stoic continuum theory. Then, given the Stoic theory of sympathy, i.e. of the physical influence of everything on everything, the relevant starting situation may well include the whole universe.

Does Chrysippus base his principle on the assumption of the existence of particular empirical causal laws? First, here we have to distinguish between what *we* would consider empirical causal laws, and what *Chrysippus* would. For the modern idea of a uniformity between certain kinds of causes and certain kinds of effects where both causes and effects

are events is very different from Chrysippus' idea of *active* causation, and corporeal causes. And our passage certainly does not entitle us to assume that Chrysippus had empirical laws concerning his own concept of cause in mind,<sup>65</sup> since the relevant differentiating factor in the comparable situations is either cause *or* *surrounding*. And if he had something of the modern idea in his mind, it would not have been *qua* causal laws. Second, from the principle (SCP<sub>-analogue</sub>) or from the Plutarch passage itself, we cannot infer that Chrysippus thought of the world as exhaustively determined by a *plurality* of particular empirical laws, short of laws that govern the entire situation of the world at a time as starting situation (and which I would not call 'particular').<sup>66</sup>

However, these points are in any case irrelevant, since the above stated specified causal principle (SCP<sub>-analogue</sub>) is not the one Chrysippus is after. For the empirical situation of scales and dice is only the analogon in his analogy. Chrysippus argues from this analogon, i.e. from *two* empirical spatio-temporally different situations (they may be fictitious or real) to *one* situation together with counterfactual reasoning about this one situation.

First, the text implies that he elaborates from the empirical analogue of his Specified Causal Principle (SCP<sub>-analogue</sub>) as follows: in starting situation  $s_1$  there is some factor  $f_1$  that is responsible for the fact that  $e_1$  and not  $e_2$  ( $e_3, \dots$ ) happens, and in starting situation  $s_2$  there is some factor  $f_2$  that is responsible for the fact that  $e_2$  and not  $e_1$  ( $e_3, \dots$ ) happens.  $f_1, f_2, \dots$  need not be causal factors; for instance,  $f_1$  can be the presence of some causal *or* some hindering element, in the object *or* the surroundings, and  $f_2$  the absence of that element.

Chrysippus then draws the analogy to *one* starting situation in which there appear to be two equally likely outcomes, i.e. to the situations of indistinguishables. These are a situation of human choice and impulse (cf. 6.3.4.1), but for the present this fact is immaterial. Chrysippus' point, as relevant here, is this:

(SCP<sub>-indist.</sub>) If in *one* starting situation  $s$  it looks as if there are two different but equally likely outcomes  $e, e^*$ , and  $e$  occurs, then there is a factor  $f$  in  $s$  such that because of  $f e$  (and not  $e^*$ ) occurred; that is, had instead of  $f f^*$  ( $\neq f$ ) been present, then  $e^*$  (and not  $e$ ) would have occurred.

<sup>65</sup> These would be laws that link the individual nature of objects with certain kinds of movements, cf. 1.2 end.

<sup>66</sup> There is no assumption of a specific law: 'whenever antecedent situation of type  $S$ , then effect of type  $E$ '. On the contrary, Chrysippus assumes the ontological differentiating factor to be *hidden*, perhaps in principle undetectable (within the ancient means of physics), so a full empirical description of type  $S$  antecedent situations seems to be ruled out. There is no complete description of the (relevant factors of the) starting situation.

The empirical case of two numerically different starting situations was only an analogon. Here, now, we can see that Chrysippus' Specified Causal Principle is based on counterfactual reasoning *about one and the same* situation. Particular empirical causal laws play no role in it. The point is made, as before, negatively, by introducing one factor that differs from the overall starting situation (this time this factor is counterfactual, i.e. not actual: 'If the effect *were* different, there *would have been* a difference in the starting situation.). Accordingly, again there is no need to describe a 'causally relevant section' of the world.<sup>67</sup>

We can obtain Chrysippus' Specified Causal Principle by generalizing from movements that ensue from situations in which two different motions seem equally likely to all movements. If we include Chrysippus' General Causal Principle and his concept of cause (as (i)), we obtain:

- (SCP) For every movement  $e$  (i) there are causal factors  $c_1 \dots c_n$  which are actively responsible for  $e$ , and (ii), for any possible alternative movement  $e^*$  to  $e$  there is a factor  $f$  in the starting situation  $s$  of  $e$ , such that because of  $f$   $e$  (and not  $e^*$ ) occurred; i.e. for  $e^*$  (and not  $e$ ) to occur there would have to have been some  $f^* (\neq f)$  instead of  $f$  in  $s$ .

Add to this the fact that for the Stoics motions are indefinitely divisible, and it can be seen that here we have a specified causal principle that defines a fully deterministic system. This principle does not involve particular empirical causal laws, nor does it rely on comparable empirical situations with comparable effects—except as analogy. Rather, it is concerned with the total actual state of the world or an unspecified part thereof. Backing of the principle would not be expected from empirical quarters. (Accordingly, no element of predictability comes in.) Instead, we would expect the justification of the principle to come from cosmological, theological, or teleological theory.

With this principle (SCP), we have (in (ii)) a full formulation of *causal* determinism in the modern sense. For the principle entails that every movement is fully determined by the antecedent situation. If the outcome were any different, in however minute a detail, then the *antecedent* situation would also have been different.

However, remember two points: first, Chrysippus' determinism is 'stricter': in addition to uniformity (of whole world state starting situations and effects), there is active causation—in the Stoic sense—involved in (i), and that is seen as the main determining factor. Second, what we may consider as 'causality' in this account of determinism, was *not* regarded as causality by Chrysippus, and if *he* had considered his determinism as *causal*, then not because of (ii) in (SCP).

<sup>67</sup> We have no evidence of converse formulations, starting with similarity of antecedent situations, rather than difference in resulting states, before the second century AD (cf. 8.2).

Plutarch does not tell us how Chrysippus' reply was to deny the spontaneous motion (*ἐπελευστική κίνησις*) the proponents of the argument in *Stoic. rep.* 1045bc introduced. For, as I said above (1.3.1), this argument does not entail causally undetermined motion, but only what one may call 'un-predetermined motion', viz. some kind of spontaneous self-motion or agent-causality. But we can see how Chrysippus' Specified Causal Principle would have served to reject such spontaneous self-motion. This principle would preclude the possibility that a thing can have a power of spontaneity (*ἐπελευστική δύναμις*) like the one that was introduced in the opponents' argument. For the existence of a thing with such a power would imply the following possibility: if the thing, by means of its power of spontaneity, caused some motion *e*, then the very same thing in the same circumstances could have brought about an alternative motion *e*\*. For by assumption, the external circumstances are exactly the same, and—it seems—so is the soul with its power of spontaneity. This means that the entire starting situation *s* would be the same. And thus we have precisely the kind of constellation that is ruled out by Chrysippus' Specified Causal Principle. This principle thus precludes un-predetermined motion as well as causally undetermined motion. This is in harmony with the fact that Chrysippus asserted not only the non-occurrence of uncaused motion, but also the absence of motion which has no antecedent causes (1.1.2). The question that remains is: how does Chrysippus' causal determinism, as tentatively captured by the Specified Causal Principle, go together with the teleological determinism proclaimed in the Plutarch passages discussed in 1.2? For an answer, we turn finally to Chrysippus' concept of fate.

#### 1.4 FATE

The preceding two sections dealt with two main aspects of Chrysippus' determinism, as he developed them in his physical writings: First, the claim that every qualitative state and every motion, up to the most minute detail, is—and is organized—in accordance with the rational, universal nature of the world, and could not be any different than it is. Here Chrysippus' determinism presented itself as teleological—in some so far unspecified way. Second, the statements that there is no motion without a cause, and that if something different happened than what actually happens, then the antecedent causal situation or the object at which the effect takes place would have been different too. Here Chrysippus developed some aspects of causal determinism, which have invited comparison with modern theories of mechanical, causal determinism.

Plainly, for Chrysippus these two aspects are neither alternative nor mutually exclusive explanations of the world. Rather they are meant to

complement each other in one comprehensive theory. We have seen that the teleological part of the theory left it undetermined in which way exactly the rational principle makes the world develop *in accordance with it*. The links between the two aspects (teleological and causal) can be found in Chrysippus' theory of fate (εἰμαρμένη), which is also the arena of most of the discussion of early Stoic determinism. Yet we do not have in extant texts and passages any presentation of Chrysippus' determinism in terms of fate (as we have for instance for later Stoics in Alexander of Aphrodisias' *On Fate*, ch. 22).

What has survived are several definitions and accounts of fate ascribed to Chrysippus, mostly without the context from which they are taken; the etymological exegesis of various terms used for fate; then, repeatedly, the statement that everything happens in accordance with fate, and various variations thereof; and last but not least, a number of longer passages concerned with Chrysippus' defence of this principle and of his theory of fate, showing that the latter is compatible with the rest of Stoic philosophy and with various common sense assumptions. The most detailed information about Chrysippus' determinism, etc. we find in these latter two kinds of passages, which are the topic of Chapters 2 to 6 below.

Still, the various accounts and definitions of fate help us to understand the relation between Chrysippus' fate theory and the aspects of determinism in his writings discussed in 1.2 and 1.3, and to provide a preliminary classification of the various aspects of fate, thus mapping out the ground for the following chapters. These accounts are a rather mixed bag, but also interconnected. I take them in groups, ordered according to different elements of Chrysippus' concept of fate.

#### 1.4.1 Fate is God is Providence is Nature is the Active Principle . . .

First, we have a number of identity statements, which identify fate with the active principle, using mostly a single noun or a noun phrase with a genitive attribute. Fate is thus equated with god or Zeus,<sup>68</sup> with providence, and with the common nature of the all;<sup>69</sup> furthermore, with the reason (λόγος) or the will (βούλησις) of Zeus,<sup>70</sup> the reason of the world or the cause of the world.<sup>71</sup> Almost all of these equations are known already for Zeno, who adorned the craftsmanlike or creative Reason or fire with the names of 'fate', 'god', 'soul of Zeus', and the 'necessity of all things',<sup>72</sup> and in his book *On Nature* maintained that fate is the same

<sup>68</sup> Plut. *Stoic. rep.* 1049f, Philod. *Piet.* c.4.31–5.2 (Henrichs, i.e. c.11.31–12.1 *DD* 545).

<sup>69</sup> Ibid.

<sup>70</sup> Plut. *Stoic. rep.* 1056c, *Comm. not.* 1076e, cf. Diogenianus in Eus. *Praep. ev.* 6.8.8.

<sup>71</sup> Stob. *Ecl.* I 79.5–7, Plut. *Stoic. rep.* 1055e.

<sup>72</sup> Tertullian, *Apol.* 21, Lactantius, *SVF* i. 160, DL 7.135, cf. Stob. *Ecl.* I 133.3–5.

as providence and (universal) nature.<sup>73</sup> Chrysippus is thus taking over traditional Stoic doctrine.

The status of such identity statements for the Stoics is far from clear, and may also vary in different cases.<sup>74</sup> I suggest as a minimalist reading that the extension of the terms involved is the same. This is confirmed by the fact that physically all these entities are considered as *pneuma* by Chrysippus.<sup>75</sup> But of course we cannot infer from the identity statements that the meanings of the terms were the same. They must have differed at least in some cases. This can be seen when one considers that there was a discussion among the Stoics about whether some of these terms have the same extension (although the Stoics did not put it this way). It is most obvious in the case of fate and providence, where Chrysippus and Cleanthes have different views about the extension of the terms. Calcidius has the details:

(1) Thus some believe it to be an assumption that there is a difference between providence and fate, the reality being that they are one. For providence will be god's will, and furthermore his will is the series of causes. In virtue of being his will it is providence. In virtue of also being the series of causes it gets the additional name 'fate'. (2) Consequently everything in accordance with fate is also the product of providence, and likewise everything in accordance with providence is the product of fate. That is Chrysippus' view. (3) But others, like Cleanthes, while holding the dictates of providence to come about also by fate, allow things which come about by fate not to be the product of providence.<sup>76</sup> (Calc. *Tim.* 144, trans. Long/Sedley)

It is a moot point how much of the passage presents Chrysippus' view; in particular, whether or not the argument (1) stems from Chrysippus.<sup>77</sup> But that the extension of the terms 'fate' and 'providence' was the same

<sup>73</sup> Stob. *Ecl.* I 78.18–20.

<sup>74</sup> It is clear from formulations like *κατὰ τὸν τοῦ Διὸς λόγον, ὃν τῇ εἰμαρμένῃ τὸν αὐτὸν εἶναι* (Plut. *Stoic. rep.* 1056c) that these statements are identity statements, and not simple predications.

<sup>75</sup> 'Chrysippus maintains that the substance of fate is a power of breath', Stob. *Ecl.* I 79.1–2; cf. SE *PH* 3.218; [Plut.] *Epit.* 1.7 (*DD* 306.1–6); Alex. *Mixt.* 224–5; Clement, *Strom.* 5.14 89.2.

<sup>76</sup> (1) Itaque non nulli putant praesumi differentiam providentiae fatique, cum reapse una sit quippe providentiam dei fore voluntatem, voluntatem porro eius seriem esse causarum, et ex eo quidem, quia voluntas, providentia est. porro quia eadem series causarum est, fatum cognominatum. (2) ex quo fieri ut quae secundum fatum sunt etiam ex providentia sint, eodemque modo quae secundum providentiam ex fato, ut putat Chrysippus. (3) alii vero, quae quidem ex providentiae auctoritate fataliter quoque provenire, nec tamen quae fataliter ex providentia, ut Cleanthes.

<sup>77</sup> I surmise that (1) is not Chrysippean. For the reduction of fate to the *series causarum* (*εἰρμός αἰτίων*) is not otherwise reported for Chrysippus, and is presumably later; see below 1.4.2. But the gist of (1) fits in with Chrysippus' view. For (2) and (3) we may have a parallel in a papyrus fragment from *PHerc* 1670 (O 1424, in Ferrario 1972, p. 81).

for Chrysippus is clear from (2), which gives both powers the same realm of application.

The passage suggests that it is essential to the meaning of ‘providence’ that it is ‘god’s will’ (ἡ τοῦ Διὸς βούλησις), whereas it is not essential to it that it may be the series of causes. The other way about, it cannot generally have been thought essential to fate to be ‘god’s will’, because for Cleanthes there is a portion of the world that is fated but not in accordance with god’s will. The specific element in providence seems to be an element of value or evaluation: god can only will what is best, hence what is good. But whereas Chrysippus thinks that whatever event or state is bad from the perspective of individuals is good from the global perspective, and god is responsible for it, Cleanthes maintained that the individual badness is not attributable to god (cf. *Hymn* 122.11–13, *SVF* i.; below 7.3.1).

In a similar vein, although Chrysippus, like Zeno, identified fate with god (or god’s reason), there are properties that belong to god which seem never to be associated with fate: e.g. god is said to be perfect in happiness (DL 7.147), not admitting of any evil (*ibid.*), or to be blessed, benevolent, caring, and beneficent (Plut. *Comm. not.* 1075e).

On the other hand, all properties of fate seem to have parallels in those of god, although for god the detailed description of the network of causes (see below) is not recorded. Thus, although co-extensive with god, fate seems to denote a particular set of aspects of god, i.e. the active principle that structures and moves the world.

#### 1.4.2 The main aspects of fate

From Chrysippus’ various accounts and definitions of fate we can extrapolate several aspects that are certainly among them. Some had been traditionally connected with fate, others are specifically Stoic. Our most reliable sources are Gellius and Stobaeus, since they not only attribute the accounts to Chrysippus, but also provide the names of the books from which they are taken. Gellius has preserved a long account, presumably a definition, from Chrysippus’ fourth book on providence, in which all the aspects are assembled:

a certain natural arrangement of the universe, with things following upon other things and being involved with other things from eternity, such a weaving-together being inexorable.<sup>78</sup> (*NA* 7.2.3)

<sup>78</sup> φυσικὴν τινα σύνταξιν τῶν ὄλων, ἐξ αἰδίου τῶν ἐτέρων τοῖς ἐτέροις ἐπακολουθούντων καὶ μεταπολουμένων\*, ἀπαραβάτου οὔσης τῆς τοιαύτης ἐπιλοκῆς.

\* The text is corrupt; I follow Sharples 1991, 96 and 197.



Stobaeus presents a whole collection of accounts of fate, taken from various of Chrysippus' works:

Chrysippus <maintains that> the substance of fate is a power of breath, administering order of the all. This he does in his second book *On the World*. But in his second book *On . . .*, in his books *On Fate*, and occasionally in others he puts forward various views, stating that 'Fate is the Reason of the universe' or 'the Reason of the things in the universe administered by providence', or 'the Reason in accordance with which past events have happened, present events happen, and future events will happen'; and instead of 'Reason' he uses 'truth', 'cause', 'nature', and 'necessity', and adds other terms which apply to the same substance from different perspectives.<sup>79</sup> (*Ecl.* I 79.1–12)

This passage thus confirms that fate does not only refer to one aspect of god or the active principle, but that we have a set of aspects, which are made apparent by the various accounts. Now to the various aspects:

First, there is an element of teleology, rationality, organization, and order. This is an aspect that was prevalent in Chrysippus' exposition of the nature of the universe (1.2), which—as the passages just quoted show—is essential also to the meaning of 'fate': Fate is a natural arrangement or organization (*σύνταξις*), the reason of the world and the order which administers everything. Diogenes Laertius reports as a Stoic account of fate 'reason in accordance with which the world is arranged' (DL 7.149).<sup>80</sup> What has been said about the common nature of the world in 1.2 holds generally for this aspect of fate.

Then, like the active principle and god, fate is described as eternal.<sup>81</sup> That is, first, fate itself does not have a beginning, but it has always been

<sup>79</sup> Χρύσιππος δύναμιν πνευματικὴν τὴν οὐσίαν τῆς εἰμαρμένης, τάξιν\* τοῦ παντὸς διοικητικὴν. Τοῦτο μὲν οὖν ἐν τῷ δευτέρῳ Περὶ κόσμου, ἐν δὲ τῷ δευτέρῳ Περὶ ὥρων\*\* καὶ ἐν τοῖς Περὶ τῆς εἰμαρμένης καὶ ἐν ἄλλοις σποράδην πολυτρόπως ἀποφαίνεται λέγων· Εἰμαρμένη ἐστὶν ὁ τοῦ κόσμου λόγος, ἢ λόγος τῶν ἐν τῷ κόσμῳ προνοία διοικουμένων, ἢ λόγος καθ' ὃν τὰ μὲν γεγονότα γέγονε, τὰ δὲ γνωμὲνα γίνεται, τὰ δὲ γενησόμενα γενήσεται. Μεταλαμβάνει δ' ἀντὶ τοῦ λόγου τὴν ἀλήθειαν, τὴν αἰτίαν, τὴν φύσιν, τὴν ἀνάγκην, προστιθεὶς καὶ ἑτέρας ὀνομασίας, ὡς ἐπὶ τῆς αὐτῆς οὐσίας τασσομένης καθ' ἑτέρας καὶ ἑτέρας ἐπιβολάς.

\* I read τάξιν for τάξει (with G); for τάξις or *ordo* see [Plut.] *Epit.* 1.29 (DD 324.1–3); Nem. *Nat. hom.* 108.16–17; Alex. *Fat.* 192.1; Cic. *Div.* I 125; Gell. *NA* 7.2.11; Augustine, *Civ.* 5.8. But nothing much hinges on this.

\*\* Long/Sedley keep ὥρων; SVF and DD emend to ὅρων (as F has it), in parallel with [Plut.] *Epit.* 1.29.

<sup>80</sup> Λόγος καθ' ὃν ὁ κόσμος διεξάγεται. This is not necessarily Chrysippean; but the use of διεξάγεται is confirmed in Chrysippus' etymological exegesis of the name of one of the Fates, 'Clotho', in Stob. *Ecl.* I 79.17–18.

<sup>81</sup> Gell. *NA* 7.2.3; Cic. *Fat.* 20, 27, 28; perhaps Diogenianus in Eus. *Praep. ev.* 6.8.11; cf. also Chrysippus' etymological exegesis of Atropos in Stob. *Ecl.* I 79.15–16: Fate is called Atropos, since ἀμετάτρεπτος καὶ ἀμετάβλητος ἐστὶν ὁ καθ' ἕκαστα διορισμὸς ἐξ αἰδίων χρόνων.

there as the organizing principle of the world. Second, the organization is such that—in some way—whatever occurs had been organized, hence fixed, to do so *before* it occurred. And this organization or fixing in advance is also eternal: what occurs was always organized and fixed to occur. Thus fate does not ever determine future events in any finite time before they happen. In particular, a person's destiny is not determined at the time of their birth or conception, etc. as some popular views had it (e.g. Tacitus, *Ann.* 6.22). Since for the Stoics the course of the world is cyclical, the conception of fate's eternity leads to indefinite repetitions of all states and events.<sup>82</sup>

The third aspect, necessity, inevitability, and immutability, was traditionally connected with fate.<sup>83</sup> It is also recorded for Zeno (Tertullian, *Apol.* 21). For Chrysippus we know it already from the passage on the common nature (1.2). It is repeatedly emphasized in the Chrysippean accounts. Fate is called 'greatest necessity' (κυριωτάτη ἀνάγκη, Plut. *Stoic. rep.* 1055e), and by substitution, 'necessity of the universe' (Stobaeus, quoted above). Moreover, there is a colourful selection of adjectives that is meant to express this aspect of fate: 'inflexible' (ἄτρεπτος), 'invincible' (ἀνίκητος), 'unconquerable' (ἀνεκβίαστος), 'unpreventable' (ἀκώλυτος), 'immutable' (ἀμετάβλητος), 'unchangeable/irrevocable' (ἀμετάθετος), and 'inexorable' (ἀπαράβατος), which becomes the standard attribute of fate in later texts. This aspect of fate is dealt with in detail in 3.4 below; here are just a couple of remarks relevant to the present context:

First, we have seen above the main reason for the inevitability of fate: nothing external to, or independent of, the universal nature (i.e. fate) can interfere with what occurs, since there is nothing external to or independent of it. In particular, human beings cannot interfere, since their natures are themselves part of the common nature or fate. Second, connected with the eternal predetermination of all motions and states is the point that it is pointless to make attempts to influence or change one's fate, since at any time all future occurrences have been determined already, and are unchangeable. This contrasts with theories like 'Egyptian fatalism' which allow for the—occasional—later change of what has been predetermined as a result of prayers (Nem. *Nat. hom.* 106.15–20).<sup>84</sup> Mostly, however, the ancients assumed that if something is fated, then it is immutable. It is this factor, the inexorability of a fate that governs everything, which opponents of the Stoics found most objectionable.

The fourth factor concerns fate insofar as it links individual objects. Several Chrysippean accounts speak of fate as connecting the things

<sup>82</sup> For different interpretations of this everlasting recurrence of the world see Barnes 1978, Mansfeld 1979, Long 1985.

<sup>83</sup> See e.g. Gundel 1914, Schrekenberger 1964 ch. 4.

<sup>84</sup> For the question how Chrysippus and Seneca dealt with the issue of whether one can influence or alter one's fate see Ch. 5.

in the world in some orderly manner. Chrysippus named the way the things are connected an 'interweaving' or 'interconnection' (ἐπιπλοκή).<sup>85</sup> This interweaving is explained by him as 'things following upon other things and being involved with other things (from eternity)'.<sup>86</sup> The idea of interconnection is found also in his etymological exegesis of 'fate' (εἰμαρμένη) as 'connecting cause of the things' (αἰτία τῶν ὄντων εἰρομένη), which is reported also as a Stoic definition of fate (DL 7.149), although for Chrysippus it was not a full definition, but gave only one aspect of fate.<sup>87</sup>

What are the things that are connected? Plotinus, reporting Stoic doctrine (without attributing it to the Stoics, and presumably from a later Stoic source) mentions the 'interconnection of *causes* with each other'.<sup>88</sup> Then there is a second Stoic etymological explanation of 'fate' (εἰμαρμένη), as 'chain (or series) of causes' (εἰρμός αἰτίων). This—rather imaginative—etymological account of one aspect of fate seems later to have become the standard *definition* of fate.<sup>89</sup> But note that it is not attested for Chrysippus.<sup>90</sup>

Thus Chrysippus seems to have been concerned either with the concatenation of all causes or with that of all things (ὄντα). His definition of fate in Gellius and his explication of the word 'fate' as connecting cause of all existing things, suggests the latter. Fate, qua pneuma in all things, links these things through space and time; through time by way of antecedent causes, through space by way of sustaining causes and sympathy.<sup>91</sup> But the difference from an interconnection of all causes is not very substantial, since the causes *are* all things—considered in a certain respect, namely insofar as they have effects (1.1.2). What matters is rather that one interpretation is precluded which is sometimes read into the accounts from a modern perspective, viz. that we have a chain of causes and effects, in which the effect of one instance of causation is the cause of the next. This cannot be the early Stoic position, since cause and effect are ontologically distinct, one being a material thing, the other an actualized predicate (1.1.2).

<sup>85</sup> Gell. *NA* 7.2.3. Stob. *Ecl.* I 78.4–6, κατ' ἐπιπλοκὴν τῶν μερῶν συνηρτημένην, cf. also Aristocles in Eus. *Praep. ev.* 15.14.2.

<sup>86</sup> Gell. *NA* 7.2.3.; the Greek text is quoted in n. 78 above.

<sup>87</sup> Cf. Diogenianus in Eus. *Praep. ev.* 6.8.8.

<sup>88</sup> Τῶν αἰτίων ἐπιπλοκὴν πρὸς ἄλληλα, Plot. *Enn.* III 1.2 236.30–1. Similarly, Plut. *Epit.* 1.27.4 (DD 322.11–12).

<sup>89</sup> Cf. e.g. Plut. *Epit.* 1.29.4 (DD 324.11–13). Nem. *Nat. hom.* 108.15–17. Alex. *Mant.* 185.5, Oenomaus in Eus. *Praep. ev.* 4.7.37, Sen. *Benef.* IV 7.

<sup>90</sup> Except perhaps in Calc. *Tim.* 144, quoted in 1.4.1; but I assume that section (1) in this passage is later Stoic—like most of what Calcidius reports from the Stoics.

<sup>91</sup> These two dimensions of the connection of fate, time, and space, are suggested by [Plut.] *Fat.* 574e.

How are we to interpret the metaphors of interweaving and chain? Once again, it matters that Stoic causes are corporeal and relative (*πρός τι*); that is, that causes are bodies while and insofar as they actively produce (or contribute to producing) an effect in a body. Both causes and effects thus have a duration (1.1.2). We can then imagine the simplified case of a *chain* of causes thus: A body  $b_1$  is the cause  $c_1$  from  $t_1$  to  $t_3$ , producing an effect  $e_1$  at a body  $b_2$ , from  $t_2$  to  $t_3$ . As a result, at  $t_3$  (perhaps a little earlier), body  $b_2$  starts being the cause  $c_2$  of another effect  $e_2$  at a body  $b_3$ ;  $c_2$  may last from  $t_3$  to  $t_5$ ,  $e_2$  from  $t_4$  to  $t_5$ . At  $t_5$  (or a bit earlier),  $b_3$  starts being a cause of a further effect  $e_3$  at a body  $b_4$ , etc. A case of a section of a *network*, which includes a combination of causes for one effect, would be this: A body  $b_1$  is the cause  $c_1$  from  $t_1$  to  $t_3$ , of an effect  $e_1$  from  $t_2$  to  $t_3$  at a body  $b_2$ ,  $b_2$  as cause  $c_2$  from  $t_3$  to  $t_5$  and  $b_3$  as cause  $c_3$  from  $t_4$  to  $t_6$  are co-causes of effect  $e_2$  at a body  $b_4$  from  $t_4$  to  $t_6$ . As a result, at  $t_6$  (or a little earlier)  $b_4$  may start being a cause of an effect  $e_3$  at a body  $b_4$  from  $t_7$  to  $t_8$ , and perhaps also being a cause of an effect  $e_4$ , perhaps at  $b_1$ , etc. That is, we have a temporal concatenation of bodies insofar as they are causes. This is in line with the formulations of interweaving of *things* or chains of *causes*, i.e. of corporeal entities, as opposed to of the incorporeal effects, motions, states, occurrents, etc.

Any body that is (and insofar as it is) a cause in the chain or partial network that leads up to a later effect may be said to be (at least partially) *causally responsible* for that motion. Thus in the simplified example of a causal chain  $b_1$  would be causally responsible for  $e_2$  and  $e_3$ ; and in the example of a causal network,  $b_1$  would be (partially) causally responsible for  $e_2$ ,  $e_3$ , and  $e_4$ . An effect  $e_j$  in a causal chain or network that ‘makes’ (or contributes to making) the body at which it occurs become in turn a cause of a further effect  $e_j$  may be called a *causal occurrent* of  $e_j$ . Thus, in our first example,  $e_1$  would be a causal occurrent of  $e_2$ , and  $e_2$  of  $e_3$ .

There is one respect in which Chrysippus’ statement of the ‘interweaving’ (*ἐπιπλοκή*) of things or causes seems superior and better in keeping with his theory than the metaphor of a chain or series of causes. A *chain* leading through time has one link at a time, and conjures up the picture of isolated parallel ‘strings’ of causation—unless one assumes that at any time the whole world state counts as a link, which may be suggested by the singular noun ‘chain’ (*ἐῤρμός*), but for which there is otherwise no support in the sources. The picture of an interweaving or concatenation of things, on the other hand, allows for indefinite complexity: a network rather than isolated strings, in which many instances of causation can occur at the same time, or be staggered and overlap, etc. Some of the details of such a network are discussed in later chapters.

In any event, the account of fate as ‘concatenation of causes (in the plural)’, which arises from the inner-cosmic perspective, is not to be

confused with the identification of fate with cause (in the singular) from the cosmic perspective, where both 'fate' and 'cause' refer to the one active principle. The difference is marked by a terminological distinction. Our sources show that Chrysippus always referred to the one cause which is identical with fate and the active principle by the feminine noun *αἰτία*. Compare the Chrysippean names for fate: 'the greatest Cause' (*ἡ μέγιστη αἰτία*, Plut. *Stoic. rep.* 1055e), 'the Cause of all things' (*πάντων αἰτία*, ibid. 1056b), 'invincible and unpreventable and unchangeable Cause' (*αἰτίαν ἀνίκητον καὶ ἀκώλυτον καὶ ἄτρεπτον*, ibid. 1056c), and 'Cause' as substituted for 'fate' in the Stobaeus passage (*Ecl.* I 79.5–10).<sup>92</sup> *Αἰτία* is identified with fate, god, and the active principle of the universe, which are all one for Chrysippus, and physically *pneuma*.<sup>93</sup> Special emphasis is put on the fact that this one Cause is the same as Reason. So in the passage from Stobaeus:

Fate is the Reason of the universe . . . and instead of Reason he uses 'truth', 'αἰτία', 'nature', and 'necessity', and adds other terms . . . (*Ecl.* I 79.5–10)

And, for the Stoics in general, Seneca writes:

As you know, our Stoics state that there are two <principles> in the nature of things from which everything occurs: Cause and matter. Matter lies inert . . . But Cause, i.e. Reason, moulds matter and turns it wherever it wants.<sup>94</sup> (*Ep.* 65.2)

'Reason' here is the pneumatic world-reason, which pervades the universe as a whole, including all things in it.<sup>95</sup> What is the relation between the one Cause (*αἰτία*) and the many causes (*αἰτίαι* or *αἴτια*), in the context of fate? Seneca uses the phrase 'the cause of the causes

<sup>92</sup> Cf. also Plot. *Enn.* III 1.2 17–22, *κυριωτάτη αἰτία*, for fate as all-pervading, greatest cause of all things, reporting Stoic doctrine.

<sup>93</sup> For the identification of the one cause with the active principle and god for the Stoics in general cf. also Marcus Aurelius, 8.27 'divine cause' (*θεία αἰτία*); 9.29 'the cause of the all' (*ἡ τῶν ὅλων αἰτία*); 5.8.4 . . . οὕτως ἐκ πάντων τῶν αἰτίων ἡ εἰμαρμένη τοιαύτη αἰτία συμπληροῦται; see further Sen. *Benef.* IV 7, *SE M* 9.75, Syrianus, *Met.* 8.3–5, Alex. *Mixt.* 178.15–19, who however has *αἴτιον*, not *αἰτία*. For Chrysippus cf. also Stob. *Ecl.* I 31.13–14: *Δία δὲ αὐτὸν* (i.e. god) *λέγουσιν, ὅτι πάντων ἐστὶν αἴτιος καὶ δι' αὐτὸν πάντα*.

<sup>94</sup> *Dicunt, ut scis, Stoici nostri duo esse in rerum natura ex quibus omnia fiant, causam et materiam. Materia iacet iners . . . causa autem, id est ratio, materiam format et quocumque vult versat.*

See also for Zeno, Stob. *Ecl.* I 133.4–5, ' . . . the reason of the all, which some call fate, pervades everything' ( . . . *διὰ ταύτης δὲ διαθεῖν τὸν τοῦ παντός λόγον, ὃν ἔνιοι εἰμαρμένην καλοῦσιν*) and cf. DL 7.135.

<sup>95</sup> Cf. Origen, *Cels.* VI 71 (358.17–19 Borret), about the Stoics: 'God's reason, which extends down to human beings and the smallest of things, is nothing but corporeal *pneuma*' (*Ὁ λόγος τοῦ θεοῦ ὃ μέχρι ἀνθρώπων καὶ τῶν ἐλαχίστων καταβαίνων, οὐδὲν ἄλλο ἐστὶν ἢ πνεῦμα σωματικόν*). Cf. for Zeno, DL 7.134.

(*Nat. quaest.* II 45, *causa causarum*). The above evidence about the identification of Cause (αἰτία), Reason (λόγος), and the active principle suggests that the relationship is as follows: the one Cause (αἰτία) is nothing but the pneumatic world-reason. This Reason penetrates all material objects, and is responsible for their shape and movements. The αἰτία of any individual cause (αἴτιον) is the portion of (rational) pneuma which permeates that cause.<sup>96</sup> For example, in an instance of causation of bread-cutting, the pneuma in the cause (αἴτιον) knife which cuts the bread is the αἰτία of that knife, i.e. that portion of the world-reason in the knife that makes it cut the bread.<sup>97</sup> Individual material objects are thus causes insofar as they are pervaded by a portion of the world-reason. This causal function of the world-reason is the ground why it is also called 'Cause' (αἰτία), and 'Fate'.

#### 1.4.3 Teleological and mechanical aspects of Stoic determinism combined

This relation between the active principle, qua Reason, or Cause, and the individual causes is crucial for our understanding of Chrysippus' determinism. It brings us closer to an answer to the question of how the teleological and causal ('mechanistic') elements of Chrysippus' determinism combine; how the predetermination of every movement by the situation of the world prior to it, and including antecedent causes of it, goes together with the eternal, rational world order. We know that the picture cannot be that of a transcendental deity who devises a plan and then realizes it in the world. There is no space for either god or god's plan outside the world. Both god (the active principle) and god's reason or βούλησις are part of the *one* material world. Fate, or Cause, qua pneuma in the things, develops the world progressively, connecting all things. For Fate or Cause or Reason forms part of every thing, and it is *what makes everything a*

<sup>96</sup> This explains the passage [Plut.] *Epit.* 1.12; (DD 310.6–7): 'the Stoics hold that all causes are corporeal; for they are *pneumata*.' (Οἱ Στωικοὶ πάντα τὰ αἴτια σωματικά· πνεύματα γάρ. As in most later sources, the terminological distinction αἴτιον/αἰτία seems lost in this passage.) Similarly, the Stoics consider Truth (ἀλήθεια, as opposed to that which is true, τὸ ἀληθές) as a *portion* of pneuma in the wise person's mind (SE PH 2.81); and Necessity (ἀνάγκη, as opposed to that which is necessary, τὸ ἀναγκαῖον, cf. 3.4), too, is characterized as pneuma (Cf. again Stob. *Ecl.* I 79.5–10).

<sup>97</sup> These considerations suggest a plausible way of understanding the difficult closing sentence of Stobaeus' report from Chrysippus' theory of causes: 'Αἰτία is the Reason in the cause (αἴτιον), or the Reason in respect of the cause as cause.' (*Ecl.* I 139.3–4, Αἰτίαν δ' εἶναι λόγον αἰτίου, ἢ λόγον τὸν περὶ τοῦ αἰτίου ὡς αἰτίου.) Making use of the above example, we can say that that aspect or part of the pneuma in the knife that makes it cut the bread is the reason in respect of the knife *qua* cause of the cutting. For although the whole knife is the cause (αἴτιον) of the cutting, strictly speaking, it is the pneuma in the knife that is responsible for the effect. I discuss alternative interpretations of this passage, and develop this point in more detail in Bobzien 1998b, section 1.

*cause*. It thus works—in part—from the inside of all things. And this pneuma in the things is nothing but god or god's will or god's reason. Thus we should imagine every individual cause as containing a piece of information about where it is heading. Every cause carries with it, and in itself, the relevant bit of god's will or plan.

The Stoics offer several analogies to explain this teleological element in their determinism. One compares god (the active principle, fate) to a human being: In god's ruling part of the soul (ἡγεμονικόν), placed by some Stoics in the aether, we find pure, condensed rationality. From this ruling part god or god's reason literally stretches (διατείνω) into everything, and connects all things, as the human soul stretches from the human ruling part into the whole body (DL 7.138, 157). Presumably, just as I can bend my finger, by sending impulses from my mind, via my nervous system, to my finger, so god can make something happen by sending impulses to the place where it is meant to happen. And just as my finger, when moving on the keyboard, shares in my rationality insofar as it is an extension of my mind, and when I have decided to type a 'z' with my finger, then my finger will type a 'z', so everything shares in god's rational pneuma and is directed by it.

But this comparison is lacking—among other things—in the element of predetermination from eternity. Here a second analogy, taken from biology, is perhaps more successful: It is the Zenonian analogy with the development of things from seeds. Again, the world is analogous to one living being. As in a seed all the information is assembled to generate a plant or animal, and will do so, provided there is nourishment around, so in the world-pneuma is assembled all the information that is needed to make the world develop, provided matter (ὕλη, the passive principle) is around. And as the sperm grow and develop into the thing and determine its life cycle (the form of which was already fully determined in the seed), so the world-pneuma (or craftsmanlike fire, in the case of Zeno) nourishes on the matter and develops into the world and determines its course.<sup>98</sup>

Another metaphor which belongs here is that of the 'unrolling' or 'unfolding' of fate through time (Diogenianus in Eus. *Praep. ev.* 6.8.9; Cic. *Div.* I 127). It is meant to illustrate the fact that everything has been predetermined from eternity, and nothing is newly created when it happens.

All the analogies leave open a number of vexing theological questions: how is rationality translated into the perfection and orderliness of the world, in accordance with a rational design? For an answer we have to

<sup>98</sup> The description of development of animals from sperm by the Stoic Hierocles (2nd cent. AD) is instructive here. The sperm absorbs matter from the pregnant body and develops into the embryo 'in accordance with certain inexorable patterns' (κατά [τι]νας ἀπαρα[β]άτους τάξεις, Hierocles, 1.5 ff.). This terminology (τάξεις, ἀπαραβάτος) is the same as is used in the description of fate.

add to the second analogy from the first the deity's awareness of the world, and/or its self-awareness. For this, again, will have to be thought of analogously to that of animals.<sup>99</sup> But the awareness, being that of a rational being, will include not only consciousness of everything that happens at the present moment, but also of everything that has happened and that will happen. We are left to speculate on the question whether the awareness of what is still unrealized in the world is direct awareness of the 'design' in the 'world-sperm', or rather god's memory of the last world cycle (cf. *Nem. Nat. hom.* 111.25–112.3) or still something else.

The problems of how this self-awareness works, and in what way rationality is present in the course of the world, are certainly important. But they play a small role in the debate over Stoic fate theory, since they do not change the fact of the exact 'unrolling' of a world every detail of which has been determined in advance.

There is one *traditional* conception of fate which I have so far left aside. This is the idea of 'personal fate', which has been aptly described as 'the preordainment of certain landmarks in individual lives and in human history: a victory, a hero's return home, an illness, someone's murdering his father, the date of his own death . . .'.<sup>100</sup> It has been argued that the early Stoics, including Chrysippus, had a conception of fate as personal fate, and that Zeno and Cleanthes had *only* this traditional picture of fate, without the idea of universal determinism.<sup>101</sup>

Our evidence for Zeno and Cleanthes on fate is minimal. But it is attested that Zeno, already, had the concept of fate as the active principle, god, nature in the world, and called it necessity (above, 1.4.1), and this suggests a fully deterministic conception, along the lines Chrysippus argued for in his first book *On Nature* (see 1.2).<sup>102</sup> Cleanthes is a special case, since for him fate and providence fall apart (1.4.1). But he considers the scope of fate as *greater* than that of providence, and our texts nowhere suggest a limited realm of fate for him; generally, what we have in his *Hymn* and in Epictetus is not sufficient for deducing the traditional concept of personal fate (see 7.3.1). Finally, as regards Chrysippus, it will be shown later that the passages which have been adduced for the claim that he was an adherent of the concept of personal fate are in fact not testimony for his having this view (see 5.3.1; 7.3.3). Tellingly, in none of

<sup>99</sup> We have some brief passages on self-awareness from later Stoics or Stoicizing authors: Sen. *Ep.* 121.6–15; Hierocles, 1.34–9, 51–7, 2.1–9, 3.52–6.24.

<sup>100</sup> Long/Sedley 1987, i. 342.

<sup>101</sup> Ibid. 392.

<sup>102</sup> If Aristocles' report in Eus. *Praep. ev.* 15.14 is in its entirety from Zeno—to whom it is ascribed—then Zeno had already the detailed conception of fate we find in the Chrysippean accounts in Gellius and Stobaeus. But I consider it more likely that the latter part of the section (*Praep. ev.* 15.14.2), which deals with fate, goes back to Chrysippus, since it bears such striking similarities to the passages from Stobaeus and Gellius quoted at the beginning of 1.4.2 (Stob. *Ecl.* I 79.5–10, Gell. *NA* 7.2.3).



the surviving Stoic accounts and definitions of fate does personal fate come in at all. All this is not to deny that this view was not absorbed into the Stoic conception of fate. First, if everything is fated, then certainly so are the 'landmarks' mentioned above, like one's date of death, etc. Second, the imagery of inevitability, which in the view of personal fate is used for isolated events, has evidently been adopted by the Stoics for the depiction of universal determinism (see above).

The fact that it is not documented that Zeno or Cleanthes worried about the consequences of universal determinism is no evidence that they did not hold universal determinism; it may just as well indicate that the consequences of Stoic teleological determinism for the questions of contingency, freedom, and moral responsibility had not yet been worked out and realized in full by the pre-Chrysippean Stoics and most of their contemporaries.

#### 1.4.4 *The Fate Principle*

Most of the Hellenistic debate over fate and determinism was not concerned with Chrysippus' conception of fate as a whole and the way it is bound up with and derives from Stoic physics, but focused on one central principle of it: the principle that everything happens in accordance with fate (*τὰ πάντα καθ' εἰμαρμένην γίνεται*, henceforth called 'the Fate Principle').

Many Hellenistic philosophers (though not all) were ready to concede to fate a limited sphere of influence, often in line with traditional views, or by allotting to fate the realm of 'physical necessity' of their respective theory. Since the inexorability of fate was generally not questioned, it then was the Stoic claim of fate's *universal* influence that had to be rejected. In the longer run this isolation of one principle from Stoic physics sparked a debate which lost sight of the origin and roots of the Fate Principle; the principle was sometimes transformed into a quasi-definition of fate, and came to be used as a kind of catch-phrase for Stoic-type determinism.

The Fate Principle is documented for Chrysippus, Zeno, Boethus, and Posidonius in one go in DL 7.149. No Stoic is reported to have deviated from this principle,<sup>103</sup> and given the enormous contentiousness of this issue, I take this as good evidence that none of the early Stoics publicly renounced it. For Chrysippus the principle is further recorded in Diogenianus (Eusebius *Ev. praep.* 6.8.1, 2, 6) and numerous times in Cicero's *On Fate* (e.g. 'fato omnia fiunt', *Fat.* 20).

<sup>103</sup> With the exception, perhaps, of the unnamed contemporary Stoics whom Galen mentions as unable to defend their psychology otherwise than by giving up the General Causal Principle, Galen, *PHP* 4.5.1.

An unravelled version of the Fate Principle can be gained from one of Chrysippus' accounts of fate:

Fate . . . 'the Reason in accordance with which past events have happened, present events happen, and future events will happen'. (Stob. *Ecl.* I 79.5–8)<sup>104</sup>

It follows that the word 'happens' (γίνεται) in the Fate Principle is to be taken as in the 'atemporal' present, which covers all times from a global perspective. From the human perspective, events are always either past or present or future, and all three classes (whose membership changes steadily with the course of time) are equally subordinate to fate.

To what ontological category do the things that happen in accordance with fate belong? They are the—incorporeal—'things that happen' or events, (γινόμενα), past, present, and future ones. This is well reflected in formulations such as the one in the quote just given, or such as 'fato fieri quaecumque fiant' (e.g. Cic. *Fat.* 21). This ontological status, I take it, is the reason for the standard formulation 'in accordance with fate' (καθ' εἰμαρμένην).<sup>105</sup> The corporeal causes each contain part of fate, but the incorporeal effects can only be 'in accordance with' fate. The wording with the preposition 'in accordance with' (κατά), is also regularly found in parallels with equivalent terms for the active principle as governing states and events.<sup>106</sup>

I assume that the verb 'to happen' (γίνεσθαι, fieri) in the formulations of the Fate Principle originally covered both changes and qualitative states alike.<sup>107</sup> However, the focus of much of the criticism of Chrysippus' fate theory is on changes or motions only. The interest of those who challenged the Stoics was not an interest in the intricacies of Stoic cosmology, which implies the direct causation (causal sustenance) of qualitative states, nor with the issue of simultaneous causation in general (the fact that whatever obtains at a time has a cause of its obtaining at that time seems not to have worried philosophers, e.g. Cic. *Fat.* 23–5), but with the pre-determination of motions or events. Chrysippus' claim that there are no changes without antecedent causes seems to have been the real bone of contention for his critics.

<sup>104</sup> Quoted in 1.4.2. Cf. also Cic. *Div.* I 126; Aristocles in Eus. *Praep. ev.* 15.14.2 and Chrysippus' etymology of the three Fates, Diogenianus in Eus. *Praep. ev.* 6.8.9.

<sup>105</sup> And perhaps also for the Stoic preference of the verb καθεῖμαρσθαι instead of simply εἶμαρσθαι (Eus. *Praep. ev.* 6.8.26, 27, 28, 29), although the use of a verb only, instead of the prepositional phrase with γίνεσθαι, is comparatively rare.

<sup>106</sup> For instance Plut. *Stoic. rep.* 1049–50 (κατὰ τὴν κοινὴν φύσιν καὶ κατὰ τὸν ἐκείνης λόγον), 1056c (κατὰ τοῦ Διὸς λόγον), *Comm. not.* 1076e (κατὰ τὴν τοῦ Διὸς βούλησιν), all quoted in 1.2; Calc. *Tim.* 144 'secundum providentiam', quoted in 1.4.1).

<sup>107</sup> In Plutarch (above, 1.2) we saw the emphasis on both qualitative states and events. This is perhaps also reflected in Eus. *Praep. ev.* πάντα κατεῖμαρφένα τὴν εἰμαρμένην 6.8.11; πάνθ' ὑπὸ τῆς ἀνάγκης καὶ τῆς εἰμαρμένης κατεῖληφθαι 6.8.1.

Bringing together the results from 1.4.1–4, we can see that fate and its workings are conceived of and described by the Stoics in two ontologically distinct ways: on the side of material entities, fate is responsible for the individuation of things, their qualities and their connection in the continuum through space and time. On the side of incorporeals, all qualitative states and all changes are the result or effect of fate. But these are only two ways of looking at the same world. The Fate Principle is a consequence of Chrysippus' theory of fate as all-pervading *pneuma*, of his theory of causation and of change. For Chrysippus and the early Stoics, giving up the Fate Principle would be giving up their basic physics or their basic ontology.

Accordingly, as will be seen in the subsequent chapters, much of Chrysippus' defence of the Fate Principle turns out to be either a demarcation of his conceptions of fate and determinism from other, more traditional, often naïve and confused ones, or an explication of the complex theory that lies behind the Stoic Fate Principle and of which it is an integral part.

Chrysippus' arguments can be divided up according to whether they simply defend the Fate Principle, or rather show how the principle is compatible with certain other essential philosophical tenets. In the next chapter I look at those arguments that survive in which Chrysippus defends the Fate Principle directly, i.e. at the arguments with a conclusion of the kind 'therefore everything happens in accordance with fate'.

## Two Chrysippean Arguments for Causal Determinism

We know that in his first book *On Fate* Chrysippus intended to demonstrate that ‘everything is encompassed by Necessity and Fate’ (Diogenianus in Eus. *Praep. ev.* 6.8.1). We also know that in order to back up this thesis he adduced quotes from Homer (loc. cit.), and carried out etymological exegesis of names connected with fate (loc. cit. 6.8.8–10). What else was to be found in this book we do not know with certainty. But we do have two arguments by Chrysippus which were designed to prove that everything happens in accordance with fate. One takes its starting point from logic, the other from the science of divination; they are discussed in 2.1 and 2.2 respectively. In both arguments Chrysippus is concerned with the question of the present truth of propositions about future events. His way of reasoning in the two cases is related.

### 2.1 CAUSAL DETERMINISM AND THE PRINCIPLE OF BIVALENCE

The problem of determinism had been connected with logic by philosophers before Chrysippus, as we know from Aristotle’s discussion of ‘future contingents’ in *De Interpretatione* 9, from the debate over Diodorus Cronus’ Master Argument, and from the so-called Mower Argument. All three cases have in common that they are concerned with the problem of what has come to be called ‘logical determinism’: a view that argues from the truth of propositions to the necessity of events; i.e. which attempts to deduce a (meta-)physical principle from principles of logic. In its beginnings this discussion seems to have been independent of the discussion of fate and instead been connected exclusively with the concept of necessity. But at least from the time of Chrysippus’ opponents onwards, the two topics were brought together.

Nowadays, logical determinism is usually considered as based on a fallacy, confounding logical relations between propositions with physical connections between objects or events. But logical determinism was a real challenge in antiquity, both before and after Chrysippus (partly due to the lack of adequate terminology and to a number of basic concepts in

logic that differ from ours), and the Stoics took part in its discussion. Chrysippus had his own thoughts about the problem, and I deal with them in Chapters 3 (Section 3.1) and 5.

For the early Stoics, however, logic, physics, and fate were in the first place connected in a different way. According to Chrysippus, Fate is both all-embracing Truth and all-determining Cause, and is in both these functions *pneuma* and thus corporeal (1.4.1–2). On the other hand, the things that are in accordance with fate are correlated to that which is true (they are actualized predicates, correlated to true propositions) and are the effect of causes (they are movements or qualitative states), and on both these counts incorporeal. This connection between what is fated and what is true is not a simple fallacy (like the reasoning from truth to necessity or fatedness in the case of logical determinism); rather it is based on an ontological foundation in which certain elements from logic and physics seem to coincide (1.1.3).

The close relation between motion and that which is true is the topic of the first of the above-mentioned Chrysippean arguments in defence of the Fate Principle. The argument proceeds from the Principle of Bivalence to the fatedness of all motions, and it is certainly among the most perplexing arguments of Chrysippus that survive. It is reported only in Cicero's *On Fate* 20–1. But it is mentioned as one of the standard Stoic arguments in favour of universal determinism in [Plut.] *Fat.* 574e–f (a list that may be based on Chrysippus' books on fate) and hence it must have been more than just some unimportant piece of *ad hoc* reasoning in the course of the discussion of fate. In Cicero we find a further number of short passages which are related to the same argument and presumably originally formed part of the argumentation, and which help to make sense of it. If one puts these scraps together, adds the relevant elements of Stoic logic and theory of causation, and interprets the argument in that light, a piece of reasoning emerges that is still somewhat exotic but—given the logical and physical preconditions—seems consistent. More importantly, the argument supplies valuable information about Chrysippus' causal theory and his view on future contingents.

The reasons why this argument has perhaps not received a satisfactory analysis so far are in the main two: first, Chrysippus' reasoning makes sense only if one takes into account certain peculiarities of Stoic philosophy, as I argue in 2.1.1; second, the argument is often lumped together with an Epicurean debate over an argument on a related topic, which Cicero adduces in the very same context, so that Chrysippus' argument is then—wrongly—classified as part of the debate on logical determinism.<sup>1</sup> I make an attempt at untangling the two argumentations in 2.1.2.

<sup>1</sup> So e.g. Sedley 1977, 96; Talanga 1986, 114; Englert 1987, 130.

## 2.1.1 Chrysippus' Bivalence Argument

Cicero reports Chrysippus' argument in *Fat.* 20–1. Here it is:

- (1) If there is a motion without cause, then not every proposition . . . will be either true or false.
- (2) For that which will have no efficient causes will be neither true nor false.
- (3) But every proposition is either true or false.
- (4) Therefore, there is no motion without a cause.
- (5) If this is so, then everything that happens happens by way of preceding causes.
- (6) If this is so, then everything happens by fate.
- (7) It hence follows that whatever happens, happens by fate.<sup>2</sup>

The argument displays a clear structure and can be adequately formalized within Stoic syllogistic and propositional logic. The second sentence (2) is not part of the formal syllogism but provides a justification for its first premiss (see 2.1.1.1). The formal structure of the argument can be presented as follows:

*P*: There is a motion without cause.

*Q*: Every proposition is either true or false.

*R*: Everything that happens happens by way of (preceding) causes.

*S*: Everything (that happens) happens by fate.

(P1)	If <i>P</i> , not <i>Q</i>	(1)
(P2)	<i>Q</i>	(3)
<hr/>		
(C1/P3)	not <i>P</i>	(4)
(P4)	If not <i>P</i> , <i>R</i>	(5)
(P5)	If <i>R</i> , <i>S</i>	(6)
<hr/>		
(C2)	<i>S</i>	(7)

<sup>2</sup> (1) Si est motus sine causa, non omnis enuntiatio . . . aut vera aut falsa erit. (2) Causas enim efficientis\* quod non habebit, id nec verum nec falsum erit. (3) Omnis autem enuntiatio aut vera aut falsa est. (4) Motus ergo sine causa nullus est. (5) Quod si ita est, omnia, quae fiunt, causis fiunt antegressis\*\*. (6) Id si ita est, fato omnia fiunt. (7) Efficitur igitur fato fieri, quaecumque fiant.

\* *Causas efficientis* (cf. *Fat.* 33 *causis efficientibus*): for the consistency of the argument *causa* has to be understood as *causa efficiens* throughout. Since all Stoic causes are efficient causes, this poses no particular problem. I shall generally use 'cause' in the sense of 'efficient cause'. However, *causa efficiens* (αἰτιον ποιητικόν, αἰτιον δραστικόν) is not an early Stoic term, and *efficiens* may well be a later addition, perhaps to demarcate *causae efficientes* from other, Peripatetic, types of causes: see also Duhot 1989, 195–7.

\*\* *causis antegressis*: the talk of preceding causes here, but not earlier in the argument, is puzzling. See below, 2.1.1.4.

The argument is a kind of polysyllogism, compounded of one *modus tollens* and two *modus ponens* syllogisms.<sup>3</sup> Or, in Chrysippean terms, it is (more or less) a complex syllogism that can be reduced to one second and two first indemonstrable syllogisms.<sup>4</sup> It appears formally valid. But that does not make it any more intelligible. For this we need to analyse some of the premisses and how they fit in with the Stoic system.

### 2.1.1.1 Motions and truths

In the first component syllogism the conditional premiss (P1) connects the negations of two Stoic principles; then one of the principles is posited (P2) and the other inferred (C1). The principle that is assumed is

(PB) Every proposition is either true or false.

This is a logical principle, usually referred to as the ‘Principle of Bivalence’. However, unlike its modern counterpart, the Hellenistic Principle of Bivalence has to be understood as ‘at any time every proposition is either true or false’, since in Hellenistic logic propositions can in principle change their truth-value (see 1.1.3). Thus, to invalidate the principle it suffices to find a proposition that has no truth-value *at some time*. The Principle of Bivalence is the only atomic or simple premiss in the argument; its truth is presupposed and it receives no justification. If we believe Cicero’s report, Chrysippus did not however consider it self-evident but thought that it needed backing up and made some effort to that effect.<sup>5</sup> This accords with the fact that from Aristotle onwards the validity of this and related principles was fiercely debated in different philosophical schools.

The Stoic principle that is inferred in the first syllogism is

(GCP) There is no motion without a cause.

This is the General Causal Principle from Stoic physics which we have encountered before, and for which the Stoics seem to have provided more than one justification (1.3.3). *Motus* (‘motion’) in (1) and (4) renders the Greek *κίνησις*, and should refer to change in general, not just to locomotion (cf. 1.1.3). The crucial premiss in the whole argument is the first one

(1) If there is a motion without cause, then not every proposition . . . will be either true or false.

<sup>3</sup> In fact, the argument is a mixture between a chain inference and an inference chain: the explicit statement of (4) is not required.

<sup>4</sup> By using the third *thema* twice; see Bobzien 1996 for Stoic reduction of syllogisms by means of *themata*.

<sup>5</sup> In *Fat.* 21, shortly after our argument we read ‘Thus Chrysippus makes every effort in order to persuade us that every proposition is either true or false.’ Cf. also *Fat.* 38. However we are nowhere told how Chrysippus backed the principle up.

As it stands, it may not sound too convincing.<sup>6</sup> It connects the negation of the General Causal Principle with the negation of the Principle of Bivalence.<sup>7</sup> The Causal Principle, belonging to physics, links *motions* and *causes*, excluding uncaused motions. The Principle of Bivalence, a logical principle, ties up *propositions* with *truth-values*, excluding truth-value-less propositions. We would normally regard the truth of the two principles as mutually independent. This was plainly not Chrysippus' view.

However, we can see from the fact that the following sentence (2) supplies an explanation of this premiss that this connection was not entirely self-evident at Chrysippus' time either. (With no signs to the contrary, I take it that (2) was added by Chrysippus himself.) So (2) may help us to understand (1) better:

(2) For *that which* will have no causes that bring it about, (*that*) will be neither true nor false.

Here we need to determine what 'that which' (*quod*) and 'that' (*id*) refer to. Grammatically 'that' is a cross-reference to 'that which' and 'that which' does not refer to anything from the preceding sentence, and simply means 'anything that'. Logically, 'that which' must refer to a class of things that at least encompasses motions, and the context, i.e. (1), suggests that it is restricted to motions. Taking the future tense in (2) to indicate counterfactuality, we then can understand the sentence as

(2') If a motion had no causes, it would be neither true nor false.

So it seems that, in *some* sense, (2) bridges the gap between physics and logic, namely by blurring the distinction. One way to unravel the sentence is by taking it as brachylogy for something like:

(2'') If a motion had no causes, a proposition correlated to that motion would be neither true nor false.

By the expression 'proposition correlated to a motion' I here try to capture what Chrysippus and the Stoics had in mind when here and elsewhere (see below) they talk about motions and events as if they have truth-values. I do not claim that Chrysippus used any such expression, but rather assume that some correspondence between motions and propositions was unreflectively presupposed. We can determine the outline of such a correspondence by considering once more the Stoic concepts of predicate, motion, and proposition.

<sup>6</sup> Dorothea Frede has recently attempted to make sense of this claim by putting it into the context of Stoic ontology (in D. Frede 1990, 209–20). I am in agreement with many of her points.

<sup>7</sup> The future tense ('will', *erit*) is used to indicate logical consequence. In other places the Principle of Bivalence is always stated in the present tense for the Stoics, cf. Cic. *Fat.* 21 end, 26, 38, *Acad.* II 95, and [Plut.] *Fat.* 574f.



Predicates are sayables (λεκτά) which can be temporarily actualized repeatedly, at the same or different objects. A motion is the actualization of a predicate at a corporeal object during a time  $t_m$  to  $t_n$  (1.1.3). (Remember that by 'motion' I, like the Stoics in this context, always understand individual motions or 'motion tokens', not generic motions or 'motion types'—which may or may not be actualized.) Propositions (ἀξιώματα), like predicates, are sayables, and can be temporarily actualized (ὑπάρχει) (1.1.3). Sextus Empiricus supplies the connection between actualization of a proposition and truth-values:

For according to them <i.e. the Stoics> true is that which subsists and is contradictory to something, and false is that which does not subsist and is contradictory to something.<sup>8</sup> (M 8.10)

Thus propositions, while true, have the ontological mode of 'subsistence', or are actualized (ὑπάρχει), whereas when false, they do not.<sup>9</sup> Truth and actualization of a proposition alike are time-dependent: a proposition can subsist and be true at one time, then cease to do so, and then subsist and be true again later—still being the same proposition. There is then a temporal correspondence between the actualizations of predicates and of propositions for the Stoics. For example, there is a temporal congruence between the predicate 'is walking', actualized at Aspasia, and the actualized proposition 'Aspasia is walking'. Or generally, whenever a predicate  $F$  is actualized at an object  $a$ , the proposition ' $a$  is  $F$ ' is actualized.

I base the suggested correlation of propositions and motions on this correspondence between actualized predicates and propositions. Let me explain this by example. Take as motion Aspasia's walking from  $t_m$  to  $t_n$  (or the actualization of the predicate 'is walking' at Aspasia from  $t_m$  to  $t_n$ ). Which proposition correlates to this motion varies over time.<sup>10</sup> From  $t_m$  to  $t_n$ , the correlated proposition is 'Aspasia is walking (from  $t_m$  to  $t_n$ )'. For all times after  $t_n$ , the correlated proposition is 'Aspasia was walking (from  $t_m$  to  $t_n$ )'. For all times before  $t_m$ , the correlated proposition is 'Aspasia will be walking (from  $t_m$  to  $t_n$ )'.<sup>11</sup> Instantiating our example, with  $t_m < \text{now} < t_n$ , into sentence (2''), we obtain:

<sup>8</sup> ἀληθές γάρ ἐστι κατ' αὐτοὺς τὸ ὑπάρχον καὶ ἀντικείμενόν τινι, καὶ ψεῦδος τὸ μὴ ὑπάρχον καὶ [μὴ] ἀντικείμενόν τινι.

<sup>9</sup> Ontologically, the Stoic theory of propositions can thus be likened to those modern theories that equate true propositions with facts (states of affairs that obtain), but deny the existence of states of affairs that do not obtain. However, since the Stoic concept of truth is temporalized, the comparison has its limits.

<sup>10</sup> The reason for defining the correlation as time-dependent is that this is how the Stoics deal with such relations, as will become clear in 2.1.1.2.

<sup>11</sup> The addition '(from  $t_m$  to  $t_n$ )' is required in the last two cases to ensure that no other past or future walks of Aspasia will give that proposition a truth-value. However, I doubt that the Stoics were aware of this point. They appear not to have used propositions containing time indices, and I have added them here for reasons of accuracy only.

If the motion of Aspasia's walking (from  $t_m$  to  $t_n$ ) had no causes, then the proposition 'Aspasia is walking' would be neither true nor false (now).

And accordingly for all motions.

What has been said about the relation between motions and correlated propositions allows us then to explicate (2) in one further respect. It can be inferred from the Stoic concepts of motion and proposition that whenever a proposition is correlated to a motion, it is actualized (*ὑπάρχει*). So for instance during the motion of Aspasia's walking from  $t_m$  to  $t_n$ , the proposition 'Aspasia is walking' is actualized. From this it follows that a proposition that correlates to a motion is never false, for the simple reason that propositions while they are false are not actualized (cf. the Sextus quote above). Sentence (2) can thus be further modified to

(2'') If a motion had no causes, a proposition correlated to it would be neither true nor false. It would not be false, since it is actualized. It would not be true, since the motion to which it correlates has no causes.

The crucial connection in (2) is hence that between truth and causation, not between truth-values in general and causation. This point will be confirmed below.

### 2.1.1.2 Future truth and causation

However, we still do not know why Chrysippus should have held that a true proposition that correlates to a motion presupposes that that motion has an efficient cause. One possible answer would be that the Stoics assumed an epistemic relation between truth and causes. They could have believed that a proposition can be true only if it can be justified. In the case of propositions correlated to motions such a justification would amount to an explanation why the motion occurred by means of stating its causes. The reasoning would be something like this: 'If there is a motion without cause, there is an actualized proposition correlated to the motion that cannot be explained. If a proposition cannot be explained, it cannot be true.' But this suggestion is unlikely to be correct. For first, there is no evidence for it; and second, Chrysippus distinguished between ontological and epistemic relations, and in his physical argument against uncaused motion (1.3) he argued precisely that the impossibility of a physical explanation does not preclude truth. So the answer to our problem cannot be merely epistemic.

A more promising approach is the concentration on future motions. For the discussion of fate and fate-determinism was concerned primarily with future events. In particular, in the context of logical determinism the discussion of statements such as the Principle of Bivalence was standardly

concerned with their validity for propositions about the future,<sup>12</sup> and the Stoics explicitly stated that the Principle of Bivalence held for propositions about the future (Simp. *Cat.* 406.34–407.3). Hence one may reasonably surmise that in our present argument, too, future events and ‘future truths’ were at the bottom of the problem—and this is indeed confirmed by some further Stoic passages from Cicero’s *On Fate* about the same topic. Before I turn to these, here are some remarks on the relation between the truth of Stoic propositions and future motions, and a brief outline of how Chrysippus’ reasoning appears to have run:

Recall first, that for Hellenistic logicians truth was generally time-dependent. For a proposition  $p$ , ‘ $p$  ἀληθές ἐστιν’ usually means ‘ $p$  is true now’ (cf. 1.1.3, 3.1.1). Accordingly, the proposition ‘Aspasia is walking’ is true now if Aspasia is now walking (cf. also DL 7.65). Thus in cases of propositions correlated to present motions, the Stoics may have thought that the motion provides a *direct* warrant of the truth of the proposition: it is Aspasia’s present motion of walking that ‘makes’ the proposition ‘Aspasia is walking’ true now.<sup>13</sup>

In the case of propositions correlated to future motions this is different. Like propositions correlated to present motions, they have their truth-value at their respective time of assertion.<sup>14</sup> For instance ‘Aspasia will walk tomorrow’ is true *now* precisely if Aspasia will walk tomorrow; in other words, if there is a time tomorrow at which Aspasia is walking. But unlike in the case of present motions there is no *direct* link between future motions and propositions correlated to them. The proposition is true *now*. The motion is *in the future*. I suggest that Chrysippus thought that nevertheless the present truth of the propositions about the future is *contingent upon* the future motion. But in Stoic philosophy there would be only one way for a connection between logic and physics (comparable to that between present motions and propositions correlated to them), by which it is possible that present truth is established by future motion, and this is by way of causation. Causes would be the only things that can bring about motions. So only if there is some causal connection between the

<sup>12</sup> Accordingly, in the introduction in *Fat.* 1 Cicero singles out propositions about the future as trouble makers, when he mentions the part of the discussion of fate that belongs to logic.

<sup>13</sup> Within Stoic ontology the immediacy of this connection between propositions and motions may have been quite literal: Assume a motion of Aspasia’s walking from  $t_m$  to  $t_o$ , with  $t_m < \text{now} < t_o$ . This motion is the actualization of the predicate ‘is walking’ at Aspasia from  $t_m$  to  $t_o$ . The proposition ‘Aspasia is walking’ is then true and actualized from  $t_m$  to  $t_o$ , too. Now given that for the Stoics predicates are parts of the propositions which contain them, the actualization of the proposition ‘Aspasia is walking’ from  $t_m$  to  $t_o$  should be (at least partially) identical with the actualization of the predicate ‘is walking’ at Aspasia from  $t_m$  to  $t_o$ , and that is with the motion of Aspasia’s walking from  $t_m$  to  $t_o$ . This does not hold for propositions correlated to future motions, since unlike the actualized ‘is walking’, the actualized ‘will be walking’ is not a motion.

<sup>14</sup> SE M 8.254–5, Cic. *Fat.* 1, Simp. *Cat.* 406–7; cf. Bobzien 1993, 65–6.

present and the future time at which the motion obtains, can we have a connection between physics and logic that can guarantee the truth of propositions correlated to future motions in a way comparable to that in the case of propositions correlated to present motions.<sup>15</sup>

One would then expect a course of reasoning behind the explanatory sentence (2) of the Bivalence Argument ('For that which will have no causes that bring it about will be neither true nor false') along the following lines: take a proposition *p* correlated to a future motion *m*, and assume that *p* fulfils all the conditions for something to be a proposition—except that it is left open, whether it has a truth-value. The proposition *p* is then not false (2.1.1.1). Now assume in addition that at the present there are no causes for *m*; nor do there exist causes now which are causally responsible (1.4.2) for *m*. Then there is nothing *now* which can establish the present truth of *p* (as there is in the case of true propositions about the present, namely the motion itself). This comes down to the fact that *p* has no truth-value *now*; that *p* is not (yet) true now.

Chrysippus' reasoning, I suggest, then continued as follows (in parallel to the first component syllogism P1, P2, C1): since the Principle of Bivalence is valid, the proposition about the future, as a matter of fact, must have a truth-value; and since falsehood has been ruled out (see 2.1.1.1) this truth-value can only be the true. Hence there must be something *now* that establishes or guarantees the truth, and since the motion is a future motion, there must be causes now which are causally responsible for it. Since this holds for all future motions (for each of them there is at least one correlated true proposition), there is hence no *future* motion without cause.<sup>16</sup>

I now back up this interpretation of Chrysippus' reasoning behind the first part of the argument in *Fat.* 20–1 with some passages from the same argumentative context from Cicero. After dealing with various other points, in *Fat.* 26–8 Cicero returns to the topic opened up by the Bivalence Argument. In *Fat.* 26 Cicero asks:

(8) Quod cum ita sit (i.e. as Carneades claims)<sup>17</sup> (9) quid est, cur non omnis pronuntiatio aut vera aut falsa sit nisi concesserimus fato fieri, quaecumque fiant?

<sup>15</sup> A present genuine prediction of the future motion could be seen as an alternative. But for the Stoics, this also presupposed a causal nexus, and thus would only shift the problem (cf. below 2.2).

<sup>16</sup> For the further step to no motion at all, past, present, or future, without cause, see below 2.1.1.5.

<sup>17</sup> The connection between *Fat.* 20–1 and *Fat.* 26: the argument in *Fat.* 20–1 is followed by: a juxtaposition of Chrysippus' and Epicurus' view (*Fat.* 21); Epicurus' theory of the swerve (*Fat.* 22–3); Carneades' criticism (a) of Epicurus: there are no uncaused motions, (b) of Chrysippus: to have causes does not mean to have antecedent and external causes (*Fat.* 23–5). Carneades cut the link between Principle of Bivalence and Fate Principle by cutting the link between *nullus motus sine causa* and *omnia causis antecedentibus habeat*, i.e. he rejected premiss (5) in Chrysippus' argument.

Freely translated:

(8) If this is so (9) why can't we hold that every proposition is either true or false, without conceding that whatever happens happens by fate?

(9) is the same as the question why we cannot hold the Principle of Bivalence without holding the Fate principle (or why the Fate Principle follows from the Principle of Bivalence), which is nothing but what Chrysippus argued for in *Fat.* 20–1. The answer is given in the form of another little quotation from Chrysippus:<sup>18</sup>

(10) Because, he says, those things which do not have causes on account of which they are going to happen cannot be true future things;

(11) Hence it is necessary that those things which are true have causes;

(12) Because of this, when they have happened, they will have happened by fate.<sup>19</sup> (Cic. *Fat.* 26)

Generally, the quotation displays strong parallels to the argument in *Fat.* 21 (cf. (10) and (2); (12) and (6)), but with the following differences: First, the passage deals exclusively with propositions about the future and future motions or events.<sup>20</sup> Second, the passage is concerned only with propositions that state things that will actually occur (future occurrents). Accordingly, the question at issue is clearly whether these propositions are true or have no truth-value, if not everything is fated—as opposed to whether they are true, *or false*, or have no truth-value. The way the argument goes precludes the alternative that the possibility of falsehood of the proposition about the future was considered. Third, a modal dimension has been added ('cannot', 'is necessary') which was lacking in *Fat.* 20–1.

The inferential step ('hence') from (10) to (11) seems correct. However, in order to see how (10) and (11) can serve to elucidate (2) and justify (1), some time indices need to be introduced: truth, in accordance with Stoic logic, should be connected with the (relative) present. This gives us:

(10') . . . those <future> things which do not have causes on account of which they are going to happen cannot be true future things <now>;

<sup>18</sup> The quotation is introduced by *inquit* without mention of any name; it is commonly ascribed to Chrysippus (Bayer 1959, 51, Yon 1950, 14) which must be correct. The argument is very close to *Fat.* 20 and bears no resemblance to the Epicurean argumentation; moreover, in *Fat.* 27 Cicero clearly replies to a bit of Stoic doctrine. The reply is presented by Cicero as a reply to Carneades; but that is chronologically impossible. Chrysippus could not have countered Carneades. Rather, everything suggests that this is a further bit of Chrysippus' argumentation first presented in *Fat.* 20–1, which Cicero works in here in his hypothetical dialogue between different philosophical schools.

<sup>19</sup> (10) Quia futura vera, inquit, non possunt esse ea quae causas cur futura sint non habent; (11) habeant igitur causas necesse est ea, quae vera sunt; (12) ita, cum evenerint, fato evenerint.

<sup>20</sup> The future tense in (12) makes it clear that 'ea quae vera sunt' in (11) refers to future things or propositions.

(11') Hence it is necessary that those <future> things which are true <now> have causes;

Still these future things are obscure entities: As in (2) above (cf. 2.1.1.1), these same entities are ascribed both causes and truth-values. However, now that the topic is future motions or events, the difficulty of this proceeding becomes more obvious. These unfortunate entities are true now but happen in the future from now. So to see what is at issue, we may want to rephrase (10) and (11), breaking the entities up into propositions correlated to future events and future events (in this way it also becomes apparent that what Chrysippus wants to say is in fact fairly complicated):

(10'') Because, he says, those propositions which correlate to future events which do not have causes on account of which they are going to happen cannot be now true propositions about the future.

(11'') Hence it is necessary that these <future> events, to which the propositions about the future that are true now are correlated, have causes.

And this is the core of the reasoning I suggested lay behind the first component syllogism of Chrysippus' argument in *Cic. Fat.* 20–1.

But there are still some bits missing in the argumentation. For one thing, neither in *Fat.* 20–1 nor in *Fat.* 26 are we told how the causes are connected with the future event, or with the present state of the world, nor at what time we are meant to envisage their existence. What we expect from the argument (and what Chrysippus stated in different contexts) is that he postulated a sequence of causes (and effects) for any future motion, which stretches continuously at least from the present right up to the motion. And this is exactly what we obtain in Cicero's criticism which follows the quotation in *Fat.* 26.<sup>21</sup> In *Fat.* 27 Cicero begins the presentation of Carneades' 'solution' by asking rhetorically:

(13) Cannot the proposition 'Scipio will conquer Numantia' be true <now> in another way than that from eternity cause connected with cause will bring this about?<sup>22</sup>

Since the example is a proposition about the future, the sentence should refer to the Stoic position cited just before (10)–(12)<sup>23</sup> (although the example itself must be later, either from Carneades or Cicero's own). Hence we can take the last clause of (13) as a Chrysippean requirement for the

<sup>21</sup> After the Chrysippus quotation in *Fat.* 26 Cicero restates the dilemma: either (a) every event is fated or (b) there can be events without cause. Chrysippus holds (a) and not-(b), Epicurus holds (b) and not-(a). Cicero, presumably following Carneades, introduces and defends as a third alternative not-(a) and not-(b), that is, in short, he rejects the dilemma.

<sup>22</sup> (13) An aliter haec enuntiatio vera esse non potest: 'Capiet Numantiam Scipio', nisi ex aeternitate causa causam serens hoc erit effectura?

An alternative translation is 'cause sowing cause', cf. Sharples 1991, 178.

<sup>23</sup> Equally the talk of the connection of causes strongly suggests Stoic provenance.

truth of propositions about future things: for Chrysippus, the proposition 'Scipio will conquer Numantia' can be true *only if from eternity cause connected with cause* will bring it about that Scipio conquers Numantia.

Thus, as anticipated, the answer is that what makes a proposition correlated to a future event true now is a continuous series or network of causes which reaches—at least—from the present time to the event. This explains how the present state of the world is causally connected with the future event: there is a cause (or set of causes) now which will bring about some motion at some body, which, thus changed, will cause some other motion, etc. up to the future event. In this way, the (present) truth of propositions correlated to future events can be guaranteed now.

However, a causal connection between the world at present and the future motion would in fact not suffice to retain the Principle of Bivalence for future propositions. For the principle requires that propositions about future events were true not only now but also in the past. ('Aspasia will go to Athens', if true now, must have been true always before now.)<sup>24</sup> Accordingly, it is required that there is a network of causes not only from the present, but from past eternity, leading up to every future motion. And this is indeed what Chrysippus argued according to (13).

If we move on to the beginning of *Fat.* 28 (where Cicero prepares his next blow against the Stoics), not only is the previous point corroborated, but we also receive some information about the type of causation at issue:

(14) And it does not follow thereby that, if every proposition is true or false, there are immutable and eternal causes, which prevent anything from happening in a different way than it will happen.<sup>25</sup>

This sentence suggests that Chrysippus had claimed that if the Principle of Bivalence holds, there are immutable and eternal causes which prevent anything from coming about differently than it will come about. (The future tense indicates that again the topic is future events.)<sup>26</sup> That is,

<sup>24</sup> Stoic propositions about future things have the property that if they are true at some point before the things happen, they are true at all times before those things happen.

<sup>25</sup> Nec, si omne enuntiatum aut verum aut falsum est, sequitur ilico esse causa inmutabilis easque aeternas, quae prohibeant quicquam secus cadere, atque casurum sit.

<sup>26</sup> The causes cannot be immutable and eternal in the sense that they actually exist eternally. For the causes 'come into existence' one after the other, as they are causes only relative to their respective effects (1.1.2). There are two possible ways of understanding the phrase 'eternal causes': either teleologically, in that in past eternity the whole sequence has been pre-determined; or the causes are eternal in the sense that their continuous sequence started in past eternity. Both are Chrysippean views.

For similar phrases from Stoic and Chrysippean doctrine in Cic. *De Fato* cf. 'ex causis aeternis rerum futurarum' (*Fat.* 21); 'ex aeternitate causa causam serens hoc erit effectura' (*Fat.* 27); 'causas inmutabilis easque aeternas, quae prohibeant quicquam secus cadere atque casurum sit' (*Fat.* 28); 'causa naturalis ex aeternitate futura vera efficiat . . .' (*Fat.* 32); 'verum ex aeternitate' (*Fat.* 33); 'ex aeternis causis apta' (*Fat.* 34); 'non esse nexa causis aeternis' (*Fat.* 38).

the causes causally responsible for future motions are sufficient causes: taken together they fully determine the future motion.<sup>27</sup>

### 2.1.1.3 Generalization to all tenses: no motion without cause

Chrysippus' reasoning, as traced so far in the passages (10) to (14) (i.e. *Fat.* 26–8) only backs up the statement: 'there are no *future* motions without causes'. According to the original argument in *Fat.* 20–1, however, the Principle of Bivalence is meant to imply the universal statement 'there is *no* motion without cause'; i.e. past and present motions are included as well. How did Chrysippus draw the connection to past and present motions? The most straightforward way would be this:

For the Stoics, every past motion in the world has been at some point 'transformed' from a future motion via a present motion into a past motion. At any time before this 'transformation' there subsisted a proposition correlated to this motion, which (motion) was then a future motion.<sup>28</sup> According to the Principle of Bivalence this proposition must be either true or false; as it is assumed to subsist, it cannot be false (see 2.1.1.1); it must hence be true. A condition for its truth was that there are causes, from eternity, in a continuous sequence, prior to it. Now, *these causes* remain the same, whether the motion is still a future motion, or has been 'transformed' into a present or past motion. Therefore every motion, including present and past ones, has to have a sequence of causes which bring it about.

In this way it can be shown that for *every* motion at any time prior to it there are causal factors leading up to it. For there must be some continuous causal connection from any time previous to the time when the motion occurs from the first possible moment at which future propositions subsist; in a world system like the Stoic one this means that for every motion there is a causal link from past eternity which finally leads up to it.

This way of drawing the connection from 'there are no future motions without cause' to 'there are no motions without cause' is not only the

<sup>27</sup> The following sentence from *Fat.* 32 appears to be another shred of Chrysippus' argumentation (so also D. Frede 1990, 210), confirming that the idea of (i) a whole nexus of causes (ii) which are sufficient to produce the effect was part of the argumentation behind the argument from *Fat.* 20–1 and 26: 'If every future event is true from eternity, so that with certainty it will happen in the way in which it will happen, then it is necessary that all things happen linked and woven together through a natural concatenation' (*Fat.* 32, 'si omne futurum ex aeternitate verum est ut ita certe eveniat, quemadmodum sit futurum, omnia necesse est conligatione naturali conserte contextequae fieri').

<sup>28</sup> I presuppose that for the Stoics the 'subsistence' of sayables, including propositions, is independent of their utterance; otherwise they could e.g. hardly assume that effects of causes are predicates or even propositions. (Cf. on this point D. Frede 1990, 214–20; see also above 1.1.2 and 3.)



simplest one, it appears also to be the one the Stoics actually took. There are some hints in Cicero's *On Fate*, but we find a better passage in his *On Divination*, with which I therefore begin:

(1) Fate . . . <is> an order and sequence of causes; for it is cause connected to cause which from itself brings about anything. (2) It is unending truth that flows from all eternity. (3) This being so, nothing has happened which was not going to happen, and equally, nothing is going to happen of which nature does not contain causes which bring about that same thing. (4) From this we can see that fate is . . . that of physics, an eternal cause of things because of which past things happened, present things are now happening, and future things will happen.<sup>29</sup> (*Div.* I 125–6)

This passage most probably reports Chrysippean thought.<sup>30</sup> What is of interest for us here is (3). It states (putting the second half before the first): nothing is a future event which has no causes that bring it about, and nothing is a past event which has not been a future event. This is precisely the step I just suggested. It implies that every past event, since it was at some point transformed from a future event into a past event, has had causes of its coming about (when it was a future event). *Mutatis mutandis*, this reasoning can be extended to present events.

That this thought was actually Chrysippus', and what is more, that it was linked to the argument at *Fat.* 20–1, is suggested by the final clause of Cicero's contrast between Epicurus and Chrysippus, which follows the argument in *Fat.* 20–1. For there Chrysippus' claim is presented as

. . . all things happen through fate and from eternal causes of future things.<sup>31</sup>

<sup>29</sup> (1) Fatum . . . id est ordinem seriemque causarum, cum causae causa nexa rem ex se gignat. (2) Ea est ex omni aeternitate fluens veritas sempiterna. (3) Quod cum ita sit, nihil est factum, quod non futurum fuerit, eodemque modo nihil est futurum, cuius non causas id ipsum efficientes\* natura contineat. (4) ex quo intellegitur, ut fatum sit . . . id quod physice dicitur, causa aeterna rerum, cur et ea, quae praeterierunt, facta sint et, quae instant, fiant et, quae sequuntur, futura sint.

\* For the use of *causas efficientes* cf. the textual note on *Fat.* 20–1 in 2.1.1 above.

<sup>30</sup> Although the passage is represented as general Stoic theory and follows a threefold distinction of sources for divination by Posidonius, the agreement with Chrysippus is striking. (1) is sufficiently similar to Chrysippean formulations from *Fat.* 27 'ex aeternitate causa causam serens hoc erit effectura', *Fat.* 34 'ex aeternis causis apta', and *Fat.* 38 'non esse nexa causis aeternis . . . ' and to the Chrysippus quotation in Gell. *NA* 7.2.3. (2) has a parallel for Chrysippus in Cic. *Nat. deor.* I 40 'sempiternam rerum futurarum veritatem'. For (4) there is a close Chrysippean parallel in Stob. *Ecl.* I 79.5–9, quoted above in 1.4.2. Note also the close connection of (1), (2), and (4) with Chrysippus' argumentation in Cic. *Fat.* 20–1 and 26–8.

<sup>31</sup> . . . omnia fato fieri et ex causis aeternis rerum futurarum.

The 'and' (*et*) may be explicatory; i.e. 'happening from eternal causes of future things' may serve to explain 'happening through fate'. For the expression *causae aeternae* see above n. 26.

This clause is of significance since neither eternal causes nor future things had occurred up to then in the argument *Fat.* 20–1 and its explication. What seems strangely incongruent is the phrase *rerum futurarum*. ‘Everything happens from eternal causes of future things (or future events)’ makes little sense: If the causes are causes of all events, they can only be causes of the future events if these latter ones *are* all events. Now, in a straightforward sense, clearly not every event is a future event. However, —as we have seen above— for Chrysippus every present and past event was at some point transformed from a future event into a present and past one. So the easiest way to remove the incongruity is by understanding the clause as saying that for all events (past, present, future) there are causes *before they happen*, i.e. in the case of present and past events, before they were transformed from future events into present and past events. And that fits perfectly with the above-cited passage from *On Divination* and its suggested interpretation. By using a number of related passages from Cicero we have thus found a way of understanding the first component syllogism of Chrysippus’ argument in *Fat.* 20–1 which provides the required link between truth and causation.

#### 2.1.1.4 The final steps of the argument: from causation to fate

The conclusion of the first component syllogism was the General Causal Principle

(GCP)     There is no motion without a cause.

The final steps of the argument (4)–(7) link this principle to the Fate Principle by way of two conditional premisses. The first conditional, with the antecedent formulated in full, runs:

(5’) If there is no motion without cause, then everything that happens happens by way of preceding causes.

How does this advance the argument? The consequent appears to be little more than a restatement of the antecedent. But we can note three differences: (i) the transformation from a negative existential proposition to an affirmative universal proposition; (ii) the use of ‘that which happens’ (*quae fiunt*) instead of ‘motion’ (*motus*); (iii) the rather unexpected addition of ‘preceding’ (*antegressis*) to ‘causes’. Which of the changes were considered significant I do not know. But for all three one can find reasons Chrysippus may have endorsed.

*ad* (i): The transition from a negative existential proposition to an affirmative universal, i.e. from ‘no *x* without *y*’ to ‘all *x* with *y*’ may have had to be delegated to a conditional since the argument is constructed on the level of (Stoic) propositional logic, which does not encompass any ‘quantifier rules’.

*ad* (ii): *Quae fiunt* I take to be an attempted rendering of the Greek *γινόμενα*, 'that which happens', or 'event'. Now, for the Stoics, every event (*γινόμενον* in its narrower sense) is a motion (*κίνησις*) (1.1.3). The change to 'event' may be motivated by the fact that the discussion of causality was mainly led in terms of motion, whereas the Fate Principle and its discussion is usually given in terms of events.

*ad* (iii): The sudden addition of 'preceding' in (5) has puzzled some scholars. The expectation is that either all occurrences of 'cause' in the argument were preceded by 'preceding', or that none were, and that 'preceding' in (5) is an addition of Cicero's. Here one has to distinguish between a textual question (how was Chrysippus' argument originally formulated; did he use 'preceding causes'?) and a philosophical one (did Chrysippus understand 'cause' as 'preceding' cause in the whole argument, or only from (5) onwards, or perhaps not at all?).

I can offer no definite answer to the textual question.<sup>32</sup> Concerning the philosophical question, it seems most likely that, whether or not 'preceding' was added to 'cause' in the entire argument, it was *understood* each time. (Cf. *Fat.* 24, Cicero or Carneades speaking: 'for when we say "without cause", what we mean is "without external antecedent cause", not "without any cause"'. This implies that Chrysippus understood 'cause' in the argument as 'antecedent cause'.) We have seen that for Chrysippus the Principle of Bivalence required precisely a sequence of *preceding* causes of every motion.<sup>33</sup> And it is the existence of preceding causes that feature in the Hellenistic controversy over uncaused motions.

Finally, the last step in Chrysippus' argument is from causation to fate. We have in the mean time already encountered this step twice (in (12) and in [Plut.] *Fat.* 574e in note 32). The conditional premiss in full runs:

(6') If <everything that happens happens by way of preceding causes>, then everything <that happens> happens by fate.

<sup>32</sup> It seems possible to me that Chrysippus' argument runs just as Cicero presents it. First, a sentence in *Fat.* 23, where the Epicureans are criticized for introducing uncaused motion, implies that Chrysippus said exactly what we had in (5): 'For although they (i.e. the Epicureans) admitted that there is no motion without cause, they did not admit that everything that happens happens by way of antecedent causes (as Chrysippus did).' (cum enim concessissent motum nulla esse sine causa, non concederent omnia, quae fierent, fieri causis antecedentibus.) I assume a Greek term like *προηγούμενος* underlying both Cicero's *antecedens* and *antegressus*. Second, in [Plut.] *Fat.* 574e we read that the Stoics wanted to defend the Fate Principle by the claim that 'nothing happens without a cause, but in accordance with preceding causes'. In this sentence, we have the same contrast as in *Fat.* 20–1 and 23; The Causal Principle is expressed in the negative without the addition of 'preceding', but in the contrasting affirmative clause 'preceding' is added.

<sup>33</sup> For the concept of preceding causes see 1.1.2, for sequences of preceding causes see 1.4.2.

This conditional opens up the vexed question of the exact relation between fate and antecedent causes—a question discussed in full below in 6.3.7 and 6.4. Suffice it here to say that, since fate is manifested in all causes, and all events have antecedent causes, this step is justified within the context of Chrysippus' fate theory.

### 2.1.1.5 *Assessment of the argument*

What shall we make of Chrysippus' argument? It would certainly be inadequate to take it as an intended proof of determinism. For if this was Chrysippus' goal, we can state that he failed, in that he committed a *petitio principii*. For the argument presupposes determinism of some kind—either it is tacitly assumed or it is implied by the Hellenistic Principle of Bivalence. Chrysippus has assumed that for all future occurrents there are, and have always been, true propositions that are correlated to them. Thus he seems to have taken it for granted that the future is 'linear', and not 'branched', at least in the following minimal sense: If  $p$  obtains at  $t$ , then for all  $t' < t$  it is true at  $t'$  that  $p$  will obtain at  $t$ . This may be considered as a weak, non-modal, form of logical determinism. In this *logical* sense his argument presupposes that the future is and has always been settled.

This assumption of a 'settled' future leaves it open what it is that (i) makes things happen, and thus (ii), indirectly, makes true propositions about the future true. And this is where Chrysippus' argument comes in. On the assumption of a linear or settled future, it makes explicit a necessary condition of the possibility of this kind of logical determinism. Logical determinism can only be true if causal determinism holds. Since, by assumption, logical determinism is true, it follows that causal determinism—of the Chrysippean kind—holds. (Some may call this form of argument 'transcendental'.)

The argument thus is an argument for a *specific theory* of determinism: Chrysippus' causal determinism. It will convince only those philosophers who accept some kind of non-modal logical determinism, and thus the fact that the future is in some sense already settled. It seems that Chrysippus argued separately for the point that the future is settled. For this is what his defence of the *Hellenistic Principle of Bivalence* (cf. Cic. *Fat.* 21 and 38) would most certainly have been. Unfortunately, the argument does not survive.

### 2.1.2 *Chrysippus versus Epicurus on truth and fate*

In *Fat.* 20–1 Cicero appears to claim that both Epicurus and Chrysippus believed that one could derive the Fate Principle from the Principle of

Bivalence.<sup>34</sup> But although it is true that both philosophers maintained that universal determinism is implied by some logical principle of the kind of the Principle of Bivalence, they were concerned with different arguments and with different concepts of determinism—a fact usually not adequately taken into account. Chrysippus' way of reasoning has been discussed above. The present section contains a brief discussion of the argument Epicurus is said to have feared (2.1.2.1–2) and of Epicurus' reply (2.1.2.3) and ends with a comparison of this position on the relation between truth and fate with the Chrysippean one (2.1.2.4).

### 2.1.2.1 The logical principle that Epicurus rejected

The relevant passages for Epicurus on truth, fate, and necessity are Cic. *Fat.* 21, 28, 37 and perhaps 19, *Acad.* II 97, and *Nat. deor.* I 70. Similarities between these passages are so strong that it is plausible to assume that each time Cicero draws from the same discussion, in which Epicurus rejected a certain argument of some logicians.

In *Fat.* 21 Cicero states that Epicurus feared that by accepting the Principle of Bivalence he would be forced to accept the Fate Principle as well, and that because of that he denied the validity of the logical principle:

For just as Epicurus fears that if he concedes this <i.e. that every proposition is either true or false> he will also have to concede that whatever happens happens by fate . . .<sup>35</sup>

and, again in *Fat.* 21:

If here for the first time I would like to agree with Epicurus and deny that every proposition is either true or false . . .<sup>36</sup>

However, later in his essay Cicero reports that Epicurus denied a related but different logical principle, namely that

. . . it is necessary that . . . of two (contradictorily) opposed things one is true and the other false.<sup>37</sup> (*Fat.* 37)

<sup>34</sup> It is a moot point how far Cicero follows his Carneadean source in *Fat.* 19–38, and a question I am not concerned with. But in this section 'Cicero' can in many places be read as 'Cicero and perhaps Carneades'.

<sup>35</sup> Ut enim Epicurus veretur, ne, si hoc <i.e. omne ἀξίωμα aut verum esse aut falsum> concesserit, concedendum sit fato fieri, quaecumque fiant . . .

<sup>36</sup> Hic primum si mihi libeat adsentiri Epicuro et negare omnem enuntiationem aut veram esse aut falsam . . .

<sup>37</sup> necesse est . . . in rebus contrariis duabus . . . alterum veram esse alterum falsum.

*Contrariis* denotes 'contradictory opposites', not 'contrary opposites' here, as is apparent from Cicero's gloss 'contraria autem hoc loco ea dico, quorum alterum ait quid, alterum negat'. Cf. also *Acad.* II 97 'contraria autem ea dico, cum alterum aiat, alterum neget'; *rebus* should refer to propositions, as is suggested not only by the use of truth predicates, but also by the use of *enuntiationes* and *enuntiata essent* in the following part of *Fat.* 37.

and in *Acad.* II 97 and *Nat. deor.* I 70 Epicurus is said to have denied the principle that for all pairs of contradictories  $p$ , not- $p$  it (necessarily) holds that either  $p$  or not- $p$ . Both times Epicurus clearly dealt with *pairs* of contradictory things.

Equally, if we have a look at the short version of the argument that Epicurus is afraid of and which Cicero inserts in *Fat.* 21 rather in passing and in indirect speech, *pairs* of contradictory propositions are implied:<sup>38</sup>

For, if one <proposition> of a <contradictory> pair<sup>39</sup> is true from eternity, it is also certain, and, if certain, also necessary.

As a first premiss of this argument we would have to imagine not the Principle of Bivalence (which was mentioned immediately before, for Chrysippus) but a logical, semantic, principle which involves pairs of propositions. Our passage suggests something like

(LEM<sub>s</sub>) Of every contradictory pair of propositions either one or the other is true.<sup>40</sup>

This principle is a semantic version of what is known as the Law of Excluded Middle (or *tertium non datur*); the (non-semantic) Law of Excluded Middle is clearly under discussion in *Acad.* II 97 and in *Nat. deor.* I 70:

(LEM) For every pair of contradictories  $p$ , not- $p$ , (necessarily) either  $p$  or not- $p$ .

In *Fat.* 37 we have a curious intermediate between Principle of Bivalence and semantic Excluded Middle. In all cases *pairs* of contradictories are at issue, something the Principle of Bivalence does not require and Chrysippus did not talk about in the context of his fate theory.<sup>41</sup>

<sup>38</sup> It seems that Cicero takes his readers to be generally familiar with the view of Epicurus' he reports here: the idea of pairs of propositions has not occurred so far in the text and only recurs in *Fat.* 37. Alternatively, this position could have come up in the gap after *Fat.* 4, but this is not very likely.

<sup>39</sup> 'si enim alterum utrum . . .' The *alterum utrum* clearly refers to pairs of propositions. The rest of the text is quoted below in 2.1.2.2.

<sup>40</sup> Or: 'Of every contradictory pair of propositions one is true, the other false'. This formulation is closer to *Fat.* 37, the other to *Acad.* II 97 and to *Nat. deor.* I 70. The argument does not require reference to falsehood.

<sup>41</sup> Formalized, with  $T[p]$  for ' $p$  is true',  $F[p]$  for ' $p$  is false', we can distinguish

$T[p] \vee F[p]$	(Principle of Bivalence)
$p \vee \neg p$	(Law of Excluded Middle)
$T[p] \vee F[p]$	(semantic Law of Excluded Middle)
$(T[p] \wedge F[\neg p]) \vee (T[\neg p] \wedge F[p])$	(Cic. <i>Fat.</i> 37)

Because of the time dependency of truth and falsehood one again has to add 'at any time' to the principles: 'At any time of any pair of contradictory propositions . . .' etc. Needless to say, I do not claim that Hellenistic philosophers always expressly distinguished between these principles. (Of course, provided  $T[p]$  is equivalent to  $p$  and  $F[p]$  is equivalent to not- $p$ , and on the assumption of matching time indices, the principles are equivalent.) But it is interesting that for the Stoics we always have the Principle of Bivalence, for Epicurus always a version of the Excluded Middle.

Hence, although in *Fat.* 21 Cicero claims that Epicurus denied the Principle of Bivalence, when it comes to citing the argument the principle can only be a version of the Law of Excluded Middle, since it but not the former involves pairs of propositions. Thus, if we follow Cicero, Epicurus appears to have denied several principles, Bivalence and different versions of the Excluded Middle. He could have thought that they all imply the Necessity Principle or the Fate Principle, and hence that he had better reject them all. However, it seems rather that it was Cicero who neglected the fact that his sources presented two different types of principles—the Stoic sources the Principle of Bivalence, the Epicurean and others variations of the Excluded Middle. For not only is that the general pattern in his *On Fate*, it is also confirmed by the fact that in *Acad.* II 95, shortly before the passage on Epicurus, and in a Stoic context, it is again the Principle of Bivalence that is quoted as a fundamental principle of logic:

Certainly it is one of the fundamentals of logic that every proposition . . . is either true or false.<sup>42</sup>

I hence assume that it was Cicero who failed to distinguish between the logical principles and that Epicurus, at least in the first place, denied only one of them, which was a version of the Law of Excluded Middle.<sup>43</sup> In *Fat.* 21 Cicero took over the Principle of Bivalence from the immediately preceding discussion of Chrysippus' argument. Not distinguishing between the two principles, he then imputed the denial of the Principle of Bivalence to Epicurus.

### 2.1.2.2 The Truth-to-Necessity Argument

The argument Epicurus was afraid of, as Cicero reports it, is based on a semantic version of the Law of Excluded Middle; it works in two steps. Cicero reports:

- (1) For if one <proposition> of a <contradictory> pair is true from eternity, it is also certain,
- (2) and, if certain, also necessary.
- (3) In this way, he believes, both necessity and fate are confirmed.<sup>44</sup> (*Fat.* 21)

<sup>42</sup> Nempe fundamentum dialecticae est quidquid enuntietur . . . aut verum esse aut falsum.

<sup>43</sup> It may make a difference which of the three he denied, or if he distinguished between them. After all, it has been suggested that in *Int.* 9 Aristotle accepts  $p \vee \neg p$ , and  $T[p \vee \neg p]$  but denies  $T[p] \vee T[\neg p]$ .

<sup>44</sup> (1) si enim alterum utrum ex aeternitate verum\* sit, esse id etiam certum, (2) et, si certum etiam necessarium: (3) ita et necessitatem et fatum confirmari putat.

\* *ex aeternitate verum*: 'truth from eternity' presupposes a time-dependent concept of truth. Whether this phrase was part of the original argument or is added by Cicero from the preceding argument by Chrysippus, I do not know. If it belonged to the argument Epicurus countered, and to the truth of future propositions, we here have a different concept of proposition from the Stoic one. (cf. also Arist. *Int.* 9 18<sup>b</sup>9 ff. ἀεὶ ἀληθές).

The first step leads from truth to certainty, the second from certainty to necessity. But plainly this is only a very compressed and fragmentary version of the original argument. By adding a version of the Excluded Middle as first premiss, and giving a more precise formulation of the conclusion, the argument can be tentatively reconstructed:

- (P1) Of every contradictory pair either one or the other is true.
- (P2) If one of every contradictory pair is true, it is also certain.
- (P3) If it is certain, it is also necessary.
- (C) Therefore, of every contradictory pair one is necessary.<sup>45</sup>

In order to understand how this argument could be threatening, two things have to be taken into consideration: first, that it holds for future propositions and events, as for any others (and was perhaps formulated for future propositions and events only, cf. *Acad.* II 97, *Nat. deor.* I 70, *Fat.* 37); second that again certain time indices are understood, namely that truth, certainty, and necessity are all tied to the present, so that the argument starts with

- (P1') Of every contradictory pair either one or the other is true *now*.

and ends with

- (C') Therefore, of every contradictory pair one is necessary *now*.

That is, it concludes that whatever happens, including what will be the case in the future, is already now necessary. The argument assigns truth, certainty, and necessity to the same—unspecified—entities. There can be little doubt that in the *De fato* version it starts out with propositions. So somewhere in the argument a switch from propositions to events would be expected (and depending on where this happens, a deterministic presupposition is there smuggled in). But the argument is too fragmentary for one to decide where.<sup>46</sup> (As the argument argues from truth via certainty to necessity, I will also call it the Truth-to-Necessity Argument.)

There is a striking similarity of the Truth-to-Necessity Argument with another Hellenistic argument that connects logic and physics. This is the

<sup>45</sup> This formulation of the conclusion is taken from *Acad.* II 97: '... si enim, inquit, alterutrum concessero necessarium esse, necesse erit cras Hermarchum aut vivere aut non vivere; nulla autem est in natura rerum talis necessitas' (*Acad.* II 97).

Long/Sedley expect *verum* instead of *necessarium*; cf. Long/Sedley 1987, i. 111. But it seems to me the passage makes sense as it stands. I give a free paraphrase: Epicurus says 'If I admit that one of every contradictory pair of propositions is (now) necessary—which is the general conclusion of the argument of the logicians—then I will also have to concede that (now) it is either necessary that Hermachus will be alive tomorrow, or it is necessary that Hermachus will not be alive tomorrow. But there is no such necessity of future "contingent" events in the nature of things.'

<sup>46</sup> In the consequent of (1) 'it' (*id*) could refer to the proposition or the 'event' expressed in it. The same holds of the (suppressed) subject terms in (2).



so-called Mower Argument (*θερίζων λόγος*), which presumably comes from the 'Megaric'-Dialectic stable.<sup>47</sup> Several variants of it have been handed down. The one closest to the argument in *Fat.* 21 is an incomplete version from Stephanus, *Int.* 34.36–35.5.<sup>48</sup> Here it is, with the missing bits added in from the parallel sources:

- (P1) <Necessarily, either you will mow or you will not mow.><sup>49</sup>
- (P2) If you will mow, you will not perhaps mow, perhaps not mow, but you will certainly mow.
- (P3) If you will not mow, you will not perhaps mow, perhaps not mow, but you will certainly not mow.
- (P4) But 'certainly' introduces 'necessarily'.
- (C1) <Therefore you will either necessarily mow or necessarily not mow.><sup>50</sup>
- (C2) Therefore, the contingent is destroyed.

The result of this argument is that non-necessity and contingency (in particular, future contingency) are annihilated. It is an argument from the discussion of logical determinism, which involves Hellenistic modal theory. Neither causation nor fate is ever mentioned. I suggest that it is in the context of this argument and of logical determinism that we have to place the Truth-to-Necessity Argument.<sup>51</sup>

Comparing the two arguments, premiss (P2) of Cicero's argument is an abridged version of the first two premisses of the Mower Argument, and premiss (P3) corresponds to the fourth premiss of the Mower Argument.<sup>52</sup> The first premiss of the Mower Argument has no parallel in *Fat.* 21, but Epicurus' example for the Excluded Middle in *Acad.* II 97 has exactly the form of this premiss, and we find a general form of it there, as well as in *Nat. deor.* I 70 and in *Fat.* 37; and this was most likely the first premiss of the Truth-to-Necessity Argument. The conclusion of the Mower Argument (C1) again, has a parallel in the conclusion of Epicurus' argument (C), as taken from *Acad.* II 97 (see above).

<sup>47</sup> An in-depth study of this argument can be found in Seel 1993, where all evidence is quoted.

<sup>48</sup> εἰ θεριεῖς, φησὶν, οὐ τάχα μὲν θεριεῖς τάχα δὲ οὐ θεριεῖς, ἀλλὰ πάντως θεριεῖς. Πάλιν ἐπὶ τῆς ἀποφάσεως, εἰ οὐ θεριεῖς, οὐ τάχα μὲν οὐ θεριεῖς τάχα δὲ θεριεῖς, ἀλλὰ πάντως <οὐ> θεριεῖς. τὸ δὲ πάντως εἰσάγει τὸ ἀναγκαῖον· τοῦ δὲ ἀναγκαίου εἰσαχθέντος οἰχέσεται τὸ ἐνδεχόμενον.

<sup>49</sup> Amm. *Int.* 131.27–8. This premiss may equally have been the third premiss rather than the first.

<sup>50</sup> Anon. in *Int.*, *Codex Parisinus Graecus* 2064 (FDS 1253).

<sup>51</sup> This general type of argument from truth to necessity is familiar from various other contexts. It is mentioned in Aristotle *Int.* 9 and in later commentaries to that text (Ammonius, Boethius), in Alex. *Fat.* ch. 10, and it forms the basis of some versions of the Lazy Argument (see 3.1, 5.1). The fact that an anecdote has it that Zeno bought seven versions of it (DL 7.25) shows that several versions were discussed.

<sup>52</sup> Cf. Seel 1993, 294.

Fate is mentioned for the first time in the concluding clause (3) of our argument in *Fat.* 21: Epicurus believes, we are told, that the argument would confirm both necessity and fate. That is, the argument is thought to lead from the Excluded Middle to the Necessity Principle and to the Fate Principle. Did Epicurus take 'to be necessary' and 'to be fated' as co-extensive, perhaps even synonymous, phrases? It seems more likely that Cicero added fate in order to make the connection with Chrysippus (see below 2.1.2.3). Either way, the Truth-to-Necessity Argument itself works entirely without employing the notion of causation. It is only the connection between the truth of a future proposition and the certainty and necessity of the corresponding event which is brought into play to prove determinism, and the transition from logic to physics is based upon an assumed general correspondence of propositions and events, not on a particular conception of the relation between *causation* and propositions. This result is confirmed by the parallel passages (*Fat.* 37, *Acad.* II 97, and *Nat. deor.* I 70), which mention neither causation nor fate;<sup>53</sup> nor did the Mower Argument.

We have thus every reason to believe that the Truth-to-Necessity Argument belonged to the family of arguments of logical determinism, and that it is grounded only upon the concepts of (present) truth of future propositions, of certainty, and of necessity, and of some assumed general correspondence between propositions and events. The argument makes an ontological statement about the fixedness of the future, without in any way filling in the physical details. A result of this is that the argument Epicurus feared is independent of any particular type of determinism. If it worked, it would work equally for causal determinism, teleological determinism (preordination by an intelligent being), and various intermediate forms.<sup>54</sup>

### 2.1.2.3 Epicurus' reply to the argument

All our sources suggest that Epicurus and the Epicureans did not develop any formal counter-arguments to refute the Truth-to-Necessity Argument, but rather reacted by directly rejecting the conclusion and consequently the logical principle in the argument that they presumed to be responsible for the determinism expressed in the conclusion.

<sup>53</sup> Long/Sedley 1987, i. 111–12, argue that the argument in *Fat.* 21 is concerned with causation. They assume an equivalence between 'true in advance' and 'determined by pre-existing causes', and consider the reference to *natura rerum* in *Acad.* II 97 as confirmation of their view. However, this reference does not prove that Epicurus employed the idea of causation in his reply, and even if he did, this does not prove that *the argument* itself was concerned with causation in any way, and given its similarity to the Mower Argument, I consider this unlikely.

<sup>54</sup> It would not work for types of fatalism like 'Egyptian fatalism' which allow for additional later interference with the world by god or destiny (see 1.4.2).

The conclusion was that one of every contradictory pair of propositions (including pairs of future propositions) is necessary. Epicurus countered this by pointing out that the nature of things is not such that every event is necessary.<sup>55</sup> The logical principle Epicurus rejected was some version of the Law of Excluded Middle. As our texts make clear (*Acad.* II 97, *Nat. deor.* I 70, and *Fat.* 28 and 37), Epicurus primarily feared the consequences of this principle for 'future contingents'. When it comes to Epicurus' reaction to this threat of universal necessity of future events, our sources are ambivalent. We learn variously (a) that Epicurus denied

- (i) that it is necessary that of a contradictory pair one is true, the other false (*Fat.* 37); and
- (ii) that it is true that of a contradictory pair one is true, the other false (*Fat.* 37); or
- (iii) that all propositions of the form 'either  $p$  or not- $p$ ' are necessary (*Nat. deor.* I 70, *Acad.* II 97); and
- (iv) that all propositions of the form 'either  $p$  or not- $p$ ' are true (*Acad.* II 97),

and (b) that the Epicureans accepted

- (v) that all propositions of the form 'either  $p$  or not- $p$ ' are true, but that in some cases neither ' $p$ ' nor 'not- $p$ ' is true (*Fat.* 37).

The idea behind position (a) was presumably something like this: Epicurus understood the logical principle as implying that either it is *now* a fact / true that Hermachus will be alive tomorrow, or it is *now* a fact / true that Hermachus will not be alive tomorrow. That is, whichever of the two will happen, it is already settled now. By denying the logical principle for future propositions, Epicurus hopes to preserve the possibility that future events are not yet fixed now. And, at least in the case where the principle concerns truth, the denial of the principle entails the invalidity of the Hellenistic Principle of Bivalence for future propositions.

Position (b) presumably interpreted claim (ii) in a weaker sense, as meaning that for every contradictory pair of propositions about events one or the other will 'come true' in the sense that there is no third possibility. Or, with time indices, that *tomorrow* either it will be a fact (true) that Hermachus will be alive then, or it will be a fact that Hermachus will not be alive then (it will be false that Hermachus will be alive). The principle, thus defused, was then granted. What was denied is that either of the propositions, 'Hermachus will be alive tomorrow', 'Hermachus will not be alive tomorrow' has a truth-value now. The reason for this denial would again be the desire to preserve the possibility that the future is not

<sup>55</sup> *Acad.* II 97, text above in 2.1.2.2 n. 45.

yet settled in the present. This position, too, entails the invalidity of the Hellenistic Principle of Bivalence for future propositions.<sup>56</sup>

The difference in terms of Epicurus' argumentation between (a) and (b) is this: According to (a) we have to assume that Epicurus considered the Truth-to-Necessity Argument as valid. Given his rejection of the conclusion, Epicurus then had to reject one of the premisses, and chose the first one, for the reasons given above. Alternatively, (b) suggests that Epicurus or some Epicureans denied the claim that the Law of Excluded Middle (now understood in a different way than in (a)) entailed the truth of one of its disjuncts and rejected thus the presumed step from the Excluded Middle to 'one proposition of every contradictory pair is true (now)'. Either way, the abolition of the Principle of Bivalence follows, and Cicero is thus in some sense justified in claiming that Epicurus gave up the Principle of Bivalence. (This curtailment of logic was not a serious difficulty for Epicurus since he did not develop any logical theory or show any interest in anyone else's; so he did not face the burden of integrating his rejection of the principles into some complex system of logic.)

Epicurus seems also to have denied the physical principle that every motion has a cause. (Although whether he ever explicitly postulated the existence of uncaused motion in the context of the discussion of physical determinism is controversial.) According to Cicero, Epicurus accepted the argumentation that if everything is caused, everything is fated (*Fat.* 18, 48) and necessary (*Fat.* 22, 48) and that, in order to preserve the movements of the human soul from being physically compelled, he defended the existence of motions without (preceding) causes. His means of backing up uncaused motion is said to have been his physical theory of the swerve (*ibid.*).

Based on the passages on Epicurus in Cicero's *On Fate* it is often assumed that the two arguments for determinism discussed by Epicurus are closely related or even interchangeable, and that the same holds for the two solutions Epicurus proffered.<sup>57</sup> But this is true at most in a very limited sense.

First, we have no evidence that the two *arguments* were connected. We have no reason to assume that the Truth-to-Necessity Argument involved causation in any way, and it is far from certain that it involved any concept of fate. Fate occurs only in *Fat.* 21, and even there not in

<sup>56</sup> These explications should suffice to show that in a logical system which has a time-related notion of truth, Epicurus' reaction is not half as idiotic as Cicero wants to make us believe. For, it is indeed not easy to see how some *res futura* can be a fact or true *now* without being settled or determined *now*, whilst it is not at all hard to see how something can be true atemporally without being determined *now*.

<sup>57</sup> Cf. e.g. Englert 1987, 130, Long/Sedley 1987, i. 111–12, Vuillemin 1984, 232, Talanga 1986, 112.

the argument itself (2.1.2.2). Cicero speaks as if Epicurus considered fate and necessity as one and the same. But we know that Epicurus in fact distinguished between fate and necessity: For him, fate is understood as an all-embracing power, and he claims that it does not exist, not at all, that is. But he concedes that there are things or events in the world that are necessary and others that are not, the latter being chance events and the things that depend on us (*παρ' ἡμᾶς*) (e.g. DL 10.133–4). So the mention of fate in *Fat.* 21 could well be Cicero's supplement, and not part of the argument Epicurus countered, which seems to have inferred universal necessity, not fate.

Second, as a consequence of the previous point, Epicurus' replies were presumably less closely connected than has been assumed. Although Epicurus may have adduced the swerve in order to explain why not everything in nature is necessary, there is no evidence for this. But we certainly have no reason to assume that Epicurus established a *direct* connection between the Excluded Middle and a chain of causes from eternity to the future event. It is not attested that Epicurus thought of fate as a series of causes, 'commencing' in eternity. (Generally, we do not have this conception of fate reported for Zeno or Cleanthes, but only from Chrysippus onwards.) The passage that has been adduced in support of such a view is Cic. *Fat.* 18–19.<sup>58</sup> However, rather than presenting part of Epicurus' discussion, this passage seems to be part of the later discussion (perhaps by Carneades) in which Epicurus and Chrysippus are used as representatives of the two opposed stands on truth and fate or necessity, and the concept of fate employed is Chrysippus' rather than Epicurus'. Altogether it looks as if Epicurus rejected the two arguments, the one from logic, the other from a theory of causation, separately.

#### 2.1.2.4 Comparison between the Bivalence Argument and the Truth-to-Necessity Argument

Before I turn to the comparison between Chrysippus' argument and the one Epicurus feared, a small textual problem needs to be cleared up: In *Fat.* 21 Cicero contrasts Epicurus' and Chrysippus' views on fate and truth:

For just as Epicurus fears that if he concedes this <i.e. that every proposition is either true or false, but see above 2.1.2.1> he will also have to concede that whatever happens happens through fate . . . so Chrysippus is afraid that if he cannot uphold the claim that every proposition is either true or false, he cannot hold that all things happen through fate and from eternal causes of future things.<sup>59</sup>

<sup>58</sup> Cf. Englert 1987, 132.

<sup>59</sup> Ut enim Epicurus veretur, ne, si hoc <i.e. the Principle of Bivalence, from previous sentence> concesserit, concedendum sit fato fieri, quaecumque fiant . . . sic Chrysippus metuit, ne, si non obtinuerit omne, quod enuntietur, aut verum esse aut falsum, non teneat omnia fato fieri et ex causis aeternis rerum futurarum.

Here, it seems, we are suddenly told that Chrysippus believes that the Principle of Bivalence follows from the Fate Principle, namely that the Principle of Bivalence is a necessary condition of the Fate Principle. This is not at all what Chrysippus' argument in *Fat.* 20 claimed. On the contrary, the argument asserted that the Fate Principle followed from the Principle of Bivalence. But this difficulty is easily dispelled: what Cicero must mean is that within the context of the argument presented in *Fat.* 20 Chrysippus spent some effort on justifying the Principle of Bivalence, because *for the derivation of the conclusion* of his argument the truth of the principle is a necessary condition, since it is one of the premisses.

There are then the following main differences between Chrysippus' Bivalence Argument and the argument rejected by Epicurus: Chrysippus' objective is to present a proof for the Fate Principle which is based on his particular concept of fate. There are no signs that he took the argument over from anyone else. The essential structure of his reasoning can be delineated in two steps as follows. First step:

- (P1) The Principle of Bivalence implies the General Causal Principle.
- (P2) The Principle of Bivalence holds.
- (C1) Therefore the General Causal Principle holds as well.

Chrysippus established (P2) independently of the General Causal Principle—how we don't know (2.1.1.1). He justified (P1) by showing that the General Causal Principle is a necessary condition for the truth of the Principle of Bivalence (2.1.1.2–3 and 5). Second step:

- (P4) The General Causal Principle implies the Fate Principle.
- (C1/P3) The General Causal Principle holds.
- (C2) Therefore the Fate Principle holds as well.

(P4) is justified by the Stoic concept of fate (see 2.1.1.4).

The structure of the Truth-to-Necessity Argument as given by Cicero in *Fat.* 21 is in outline:

- (P1) Of every contradictory pair either one or the other is true, i.e. the (semantic) Law of Excluded Middle holds.
- (P2) Truth implies certainty.
- (P3) Certainty implies necessity.
- (C) Therefore, of every contradictory pair one is necessary.

and perhaps:

- (C2) Therefore, whatever happens is necessary; i.e. the Necessity Principle holds.
- (C3) Therefore, whatever happens is fated, i.e. the Fate Principle holds.

Here the truth of none of the conditionals is established by showing that its consequent is a necessary condition of its antecedent. The argument

proceeds from (present) truth via certainty to necessity and perhaps to fate. This kind of argument is not recorded for the Stoics.<sup>60</sup> What Epicurus regarded as a threat to freedom (like Aristotle, and interpreters of Diodorus) was not, as far as we know, employed as a proof of the Fate Principle by any Stoic, and I doubt whether the Stoics accepted it as valid. Rather, the similarity of the argument to the Mower Argument suggests that they would have considered it invalid, since they regarded the Mower Argument as a sophism.<sup>61</sup>

Equally, nothing suggests that Epicurus dealt with the argument we have for Chrysippus. It has been assumed repeatedly that Epicurus stated that the Principle of Bivalence implies the Causal Principle; this conditional (or its contraposition) has even been called an 'Epicurean Principle'.<sup>62</sup> But there is no evidence that Epicurus ever stated the 'Epicurean Principle'. Rather, this claim is usually based on the—wrong—assumption that Chrysippus and Epicurus, in *Fat.* 20–1, are concerned with the same kind of argument.

It is true that both arguments derive a physical principle of determinism from a logical principle. However, the connection between logic and physics is quite different in the two cases. Chrysippus' argument is rooted in Stoic ontology, and it derives the Fate Principle from the dependency of the truth of propositions correlated to *future* motions upon a continuous, eternal, causal nexus. The connection in the Truth-to-Necessity Argument is much more general. It is based on a certain understanding of the Law of Excluded Middle, and on a correspondence between true propositions (about past, present, and future) and events and is independent of the tense of the propositions. Causation is not involved.

Finally, for the Truth-to-Necessity Argument modality is essential. In it the Fate Principle (*if* it came in) was derived from the statement that everything is necessary. But necessity is not part of Chrysippus' argument. The latter does not involve Chrysippus' or any other modal theory. What is more, Chrysippus' modal system explicitly allows for contingent propositions about the future (3.1). This in particular suggests that Chrysippus would not have accepted or employed the Truth-to-Necessity Argument for his own purposes. In fact, in order to preserve possibility and contingency, part of his efforts were devoted to distinguishing between a concept of fate and a concept of necessity which are both founded in, and pertinent to, physics but nevertheless not equivalent (see 3.1, 3.4, 6.3.7).

<sup>60</sup> The argument is however a number of times—wrongly—invoked against Chrysippus' and generally Stoic fate and modal theory by later critics; cf. e.g. Alex. *Fat.* ch. 10.

<sup>61</sup> Cf. [Plut.] *Fat.* 574e.

<sup>62</sup> '[P]rincipe epicurien', Vuillemin 1984, 232; 'epikureischer Grundsatz', Talanga 1986, 112.

## 2.2 CAUSAL DETERMINISM AND PREDICTION

Closely related to the problem of determinism and the truth of propositions about the future is the issue of the truth of predictions. For predictions are (or contain) statements about the future. Accordingly, in antiquity fate and prediction have been frequently regarded as linked—in its simplest form in the common idea that what is predicted is a person's fate. In later antiquity, the relation between fate, determinism, and prediction is discussed on a highly technical level in the context of philosophical theology.<sup>63</sup>

Chrysippus, too, concerned himself with the relation between fate and prediction. The Stoics generally treated prediction under the heading of divination, a topic on which Chrysippus wrote two books, and which he—like most of his contemporaries—took rather seriously: seriously enough certainly to invoke it in support of his theory of fate. Eusebius reports that Chrysippus attempted to establish the Fate Principle by way of a proof which employs the existence of divination, and he preserves parts of this proof (*Praep. ev.* 4.3.1–2). Cicero confirms that Chrysippus used his theory of divination to back up fate.<sup>64</sup> In further support of this, we learn from [Plutarch]'s *On Fate* that one of the standard Stoic arguments for the Fate Principle employed divination.<sup>65</sup> The proof, as far as it is extant, contains several interpretational problems, and it was accused of circularity in antiquity. It does, however, gain some plausibility when one realizes its link with the question of future truth in general, and its kinship with Chrysippus' Bivalence Argument in particular.

## 2.2.1 Chrysippus' concept of divination

For a full understanding of Chrysippus' argument it will prove helpful first to cast a quick glance at Chrysippus' conception of divination. The early Stoics considered divination as an art or expertise (τέχνη) or as a science (ἐπιστήμη). Chrysippus defined divination as 'science which contemplates and interprets the signs which are given to human beings

<sup>63</sup> Cf. e.g. Mignucci 1985, 1996, Craig 1988.

<sup>64</sup> Cic. *Fat.* 11, directed at Chrysippus: 'All this is destroyed if the essence and nature of fate are confirmed by the theory of divination. For if divination exists . . .' The casual presentation of this thought without further comment suggests that in the gap in *Fat.* 4–5 an argument by Chrysippus from divination to fate was presented or at least mentioned.

<sup>65</sup> *Fat.* 574e, cited below in 2.2.2. Two further sources, Alex. *Fat.* 201.32–202.2 and Calc. *Tim.* 161, which both give Stoic thought but not necessarily early Stoic theory, report parts of an argument in which fate is proved through divination. These passages, especially that in Alexander, are very close to Eusebius' report and their proof most probably goes back to that of Chrysippus. But as Chrysippus is not named and both sources otherwise give later Stoic fate theories (cf. Ch. 8), I make use of these texts only for additional support. In any case, they provide even less information than Eusebius.



by the gods'.<sup>66</sup> These signs are given by the gods owing to their benevolence, thereby enabling human beings to acquire information about the future that would otherwise be hidden from them. Thus, for the existence of divination at least two things are presupposed, namely the existence of the gods and the fact that they give signs.

According to Cicero, for the Stoics a further element is involved in scientific divination. Some regularity between the signs and the predicted events is assumed; that is, the same or similar signs are taken to announce the same or similar future events.<sup>67</sup> Cicero writes:

For it is not a Stoic doctrine that the gods concern themselves with individual cracks in the liver or individual bird-songs . . . Their view is that the world was from its beginning set up in such a way that certain things should be preceded by certain signs, some in entrails, some in birds, others . . . (*Div.* I 118, trans. Long/Sedley)

The regularities between signs and future events were collected by induction and tradition; and, once they were properly formulated, the Stoics called them 'theorems' (*θεωρήματα*, Cic. *Fat.* 11–17). Such theorems express the relation between generic signs and type events. It is noteworthy that divination, as viewed by the Stoics, thus had all the elements of an empirical science: data, induction, propositions of a type similar to 'laws of nature', explanation, and prediction.<sup>68</sup> This philosophical upgrading of divination by lifting it on to a more abstract, theoretical, level may go back to Chrysippus—it certainly fits well with his above-cited definition of scientific divination, his concern with the form of the divinatory theorems,<sup>69</sup> and his view of the eternal predetermination of all events.

Note that even though the concepts of regularity and universality were crucial for the science of divination, there is no evidence that the early Stoics put the relation between signs and signified events in terms of causation. Nothing suggests that for them it is part of something's being a sign that it is causally relevant for the predicted event. All the sources imply is observed uniform correlation.<sup>70</sup>

### 2.2.2 Chrysippus' proof of fate through the existence of divination

Chrysippus' proof is found in Eusebius' *Preparation for the Gospel* 4.3 (169–72 Mras), in an extract of about two and a half pages from a book

<sup>66</sup> 'Vim cognoscentem et videntem et explicantem signa, quae a dis hominibus portantur' (Cic. *Div.* II 130); cf. SE M 9.132, *μαντική . . . ἐπιστήμη οὐσα θεωρητική καὶ ἐξηγητική τῶν ὑπὸ θεῶν ἀνθρώποις διδόμενων σημείων*.

<sup>67</sup> As the signs are not causes of the events (see below and 4.2.2), it does not matter for the Fate Principle whether the signs and events have to be the same in all respects or only similar.

<sup>68</sup> For a useful discussion of scientific divination see Hankinson 1988, esp. 137 f.

<sup>69</sup> Cf. 4.2.1 on this point.

<sup>70</sup> Cf. 4.2.2 for a detailed discussion of this issue.

by the Epicurean Diogenianus, probably written in the second century AD. Diogenianus seems to have had Chrysippus' books *On Fate* available (which makes him a valuable source), and in these pages he presents and criticizes parts of one of these books—presumably the first, since in this work Chrysippus attempted to prove the Fate Principle (Eus. *Praep. ev.* 6.8.1). Polemical criticism against divination, in Epicurean fashion, fills most of the passage, with very few and very short quotes from or references to Chrysippus' text sprinkled in. Here are the passages that are of primary relevance:

(1) He <i.e Chrysippus> gives another proof in the aforementioned book <i.e on fate>, which goes like this: For, he says, if it were not the case that everything is encompassed by fate, it would not be the case that the predictions of the seers are true. This, too, is full of folly.<sup>71</sup> (*Praep. ev.* 4.3.1)

and a little later:

(2) In this way Chrysippus gives the proof, establishing each of them through the other: For he wants to prove that 'everything happens in accordance with fate' from 'divination exists', and he cannot prove that 'divination exists' in any other way than by presupposing that 'everything occurs in accordance with fate'.<sup>72</sup> (*ibid.* 4.3.2)

The actual information that Diogenianus supplies about Chrysippus' proof is meagre:

- From passage (2): Chrysippus wants to prove the proposition (*P*) 'everything happens in accordance with fate' from the proposition (*Q*) 'divination exists', for which in turn he has to presuppose (*P*).
- From passage (1): Chrysippus argued 'If it were not the case that (*R*) everything is encompassed by fate, it would not be the case that (*S*) the predictions of the seers are true'.

The crucial bit of information, i.e. what the relation is between divinatory predictions and Stoic fate, is not provided, and has to be inferred (see 2.2.3). But first the argument itself needs to be reconstructed.

According to passage (2), Chrysippus employed the pair of propositions (*P*) and (*Q*) in his proof.<sup>73</sup> The formal structure of the proof is simple. The demonstrandum is 'everything happens in accordance with fate'. One

<sup>71</sup> Φέρει δὲ καὶ ἄλλην ἀπόδειξιν ἐν τῷ προειρημένῳ βιβλίῳ τοιαύτην τινά· μὴ γὰρ ἂν τὰς τῶν μάντεων προρρήσεις ἀληθεῖς εἶναι φησιν, εἰ μὴ πάντα ὑπὸ τῆς εἰμαρμένης περιείχοντο. ὃ καὶ αὐτὸ πολλῆς εὐθεΐας μεστόν ἐστιν.

<sup>72</sup> οὕτω τὴν ἀπόδειξιν ἡμῖν Χρύσιππος κεκόμικεν δι' ἀλλήλων κατασκευάζων ἑκάτερα. τὸ μὲν γὰρ "πάντα γίνεσθαι καθ' εἰμαρμένην" ἐκ τοῦ "μαντικὴν εἶναι" δεικνύναι βούλεται, τὸ δὲ "εἶναι μαντικὴν" οὐκ ἂν ἄλλως ἀποδείξει δύναιτο, εἰ μὴ προλάβοι τὸ "πάντα συμβαίνειν καθ' εἰμαρμένην".

<sup>73</sup> This is confirmed by the brief passage quoted above from Cic. *Fat.* 11, where 'divination supports fate' must mean that the existence of divination supports fate.

of the premisses is: 'divination exists'.<sup>74</sup> For a Chrysippean proof we need (at least) one more premiss, a non-simple one. This should be the conditional 'if divination exists, everything happens in accordance with fate'. We then obtain:

- (P1) If divination exists, everything happens in accordance with fate.
- (P2) But divination exists.
- (C) Therefore everything happens in accordance with fate.

The argument would then have been a first Chrysippean indemonstrable.<sup>75</sup> Diogenianus called it a proof, and—if for the moment we grant Chrysippus the truth of its premisses—the conditions for a Stoic proof (*ἀποδείξις*) are indeed satisfied: the conclusion is 'non-evident' (*ἄδηλος*) and revealed by the antecedent of the conditional premiss (P1), which the Stoics take to be evident or accessible. (Cf. SE PH 2.135–43 for the Stoic concept of proof.)

How does this proof from passage (2) relate to passage (1)? Both passages clearly deal with the same Chrysippean argument. In (1) Chrysippus argued 'For if it were not the case that everything is encompassed by fate, it would not be the case that the predictions of the seers are true'. I suggest that this is not a lax restatement of premiss (P1), but is meant to provide a justification of it (note the 'for' (*γάρ*) at the beginning of the sentence). The formal structure of Chrysippus' argument is then parallel to that of the first syllogism of the Bivalence Argument from Cicero *Fat.* 20–1: The conditional premiss of a Chrysippean first indemonstrable is justified and explained by a counterfactual conditional.

How does the counterfactual conditional justify premiss (P1)? It does so, because, first, the proposition 'everything is encompassed by fate' (*R*), which is negated in the antecedent of the counterfactual, is equivalent to or entails the consequent 'everything happens in accordance with fate' (*P*) of premiss (P1); and second, the proposition 'divination exists' (*Q*) is equivalent to or entails 'the predictions of the seers are true' (*S*), i.e. the proposition negated in the consequent of the counterfactual.

It is plain that for Chrysippus *R* is equivalent to, or entails, *P*.<sup>76</sup> We can show that Chrysippus most probably also took *Q* ('divination exists')

<sup>74</sup> I understand *ἐκ τοῦ 'p' δεικνύναι βούλεται* as implying that '*p*' is a premiss in the proof.

<sup>75</sup> Alternatively, it could have been a second indemonstrable, with (P1') 'If it is not the case that divination exists, it is not the case that everything happens in accordance with fate' (i.e. the contraposition of P1) as conditional premiss.

Cf. also SE M 9.132 for a related Stoic argument which proves—instead of the Fate Principle—the existence of god (*Q*) from the existence of divination (*P*). It is a modification of a second indemonstrable, its form being: If not *Q* then not *P*. But it is absurd that not *P*. Therefore *Q*. The argument also employs Chrysippus' account of divination.

<sup>76</sup> This on the assumption that Diogenianus presents these propositions correctly. Cf. Eus. *Praep. ev.* 6.8.1 and 6.8.3, where Diogenianus reports almost exactly the same phrases for Chrysippus.

to be equivalent to, or to entail, *S* ('the predictions of the seers are true'). For this we first have to disambiguate *S*. Diogenianus paraphrases it as 'that all predictions of the so-called seers come about' (*Praep. ev.* 4.3.1). But Chrysippus can hardly have seriously claimed that all factual predictions by any odd seer were or came true. The fact that human beings can err was certainly not unknown to the Stoics. According to Cicero, for instance, the Stoics have this view about false predictions:

Badly conjectured and badly interpreted <signs> are false not because of any fault in the things, but because of the lack of technique of their interpreters. (*Div.* I 118; cf. *ibid.* 124–5)

In the light of divination as science, concerned with regularities (see 2.2.1 above), we can assume that Chrysippus, if asked, would have explicated his claim somewhat as follows: the theorems and predictions of the seers are true provided that the seers are genuine seers, i.e. honest and no charlatans, and that they master their science and have not made interpretational mistakes in the individual instances of prognostication. A true prediction made by a diviner is then more than just a statement about the future. The diviner must possess a certain expertise and be able to give some justification of its truth—for instance by referring to the method employed.

If the Stoics took *S* in this way, this has consequences for their understanding of the sentence 'divination exists' (*Q*). For this sentence can then be paraphrased roughly as 'there are genuine, scientific diviners who are in command of some branch of divination and practise it'. Thus understood, Chrysippus' statement 'divination exists' does indeed imply—or may even be equivalent to—his claim 'the predictions of the seers are true'. If divination exists, there are people who do or can genuinely predict the future by using certain accepted scientific methods.

We can then see that Chrysippus' mode of reasoning is of the same type as in the Bivalence Argument: Just as the Fate Principle followed from the Principle of Bivalence, since fate is a necessary condition of the possibility of the Principle of Bivalence, so here the claim is that the Fate Principle follows from the existence of divination because fate is a necessary condition of the possibility of divination.<sup>77</sup> In epistemic

<sup>77</sup> More precisely the Fate Principle follows from divination because an *implicans* of the Fate Principle is a necessary condition of the possibility of an *implicate* of divination. With

P: Everything happens in accordance with fate.

Q: Divination exists.

R: Fate encompasses everything.

S: The predictions of the seers are true.

we have:

*P* follows from *Q* because (*R*, which entails) *P*, is a necessary condition of the possibility of (*S*, which follows from) *Q*.

terms: fate is the *ratio essendi* of divination, whereas divination is the *ratio cognoscendi* of fate.<sup>78</sup>

The Alexander passage mentioned above confirms that this was the original pattern of the argument. There we read:

Those who praise divination and say it can be preserved only by their doctrine, and use divination as justification of the <claim that> ‘everything happens in accordance with fate’. . .<sup>79</sup> (Alex. *Fat.* 201.32–202.2)

With this sentence Alexander introduces a Stoic argument about divination and compatibilism; the sentence looks like a compressed version of the same argument that Diogenianus reports: ‘Divination can be preserved’ should mean ‘the existence of divination can be preserved’; ‘to use *x* as a justification for *y*’ can be understood as ‘to use *x* as a premiss in a proof of *y*’; ‘their doctrine’ in the context refers to ‘the Stoic doctrine of fate’, i.e. the Stoic view that everything is fated. The passage then implies that the Stoics assume that divination exists and that their fate theory is a necessary condition for its existence; and that this proves or justifies the Fate Principle—which is basically what we have in Diogenianus.

Chrysippus seems to have established the atomic premiss ‘divination exists’ (P2) of his proof by pointing out that it is evident (*ἐναργής*) that the predictions of the seers come true, i.e. by appealing to the success and presumably the general acceptance of divination.<sup>80</sup> At least, this is suggested in Diogenianus’ report by his interpolation of two objections to the proof which are levelled against the thesis that it is *evident* that all divinatory predictions come true:

<sup>78</sup> This particular way of reasoning must have prompted Diogenianus’ objection that Chrysippus uses circular reasoning (*diallelus*) in his argument (cf. *δι’ ἀλλήλων* in (2) above): what is to be proved, i.e. the Fate Principle, has already been used in the conditional premiss, or in its justification. But this objection is of course nonsense: arguments of the following kind are valid and not at all circular:

*Q* is a necessary condition for *P*.

Now *P*.

Therefore *Q*.

*Q* is not asserted in the conditional premiss, but is used only hypothetically, as part of the conditional premiss.

<sup>79</sup> Οἱ δὲ ὑμνοῦντες τὴν μαντικὴν καὶ κατὰ τὸν αὐτῶν λόγον μόνον σώζεσθαι λέγοντες αὐτὴν, καὶ ταύτῃ πιστεῖ τοῦ πάντα καθ’ εἰμαρμένην γίνεσθαι χρώμενοι . . .

Cf. Eus. *Praep. ev.* 4.3.6 ‘because of which above everything Chrysippus seems to praise divination’ (διὸ καὶ μάλιστα δοκεῖ Χρύσιππος ὑμνεῖν τὴν μαντικὴν).

<sup>80</sup> However, ‘divination exists’ is also the conclusion of at least one other proof by Chrysippus (Cic. *Div.* I 82–4).

- that the ‘evidence’ or obviousness (ἐνάργεια) equally confirms the claim that most, but not all, predictions come true<sup>81</sup>
- and that the ‘evidence’ that predictions come true cannot establish a science, because it can always be just a coincidence.<sup>82</sup>

The only reason Diogenianus can have to criticize the ‘evidence’ of the truth of divination at this place is that this thesis played a role in Chrysippus’ proof.

That it did so is perhaps further corroborated by [Plut.] *Fat.* 574e in the list of Stoic arguments for the Fate Principle. Among the also-rans of the arguments we read:

All people respect divination highly inasmuch as it co-exists with god.<sup>83</sup>

If the high regard of divination was used as an argument for fate, this must have been done via the existence of divination. That is, as in Diogenianus, the evident success of divination proves its existence and its existence implies the Fate Principle.<sup>84</sup>

### 2.2.3 Causal determinism as necessary condition for the existence of divination

We may share Diogenianus’ scepticism about the existence of genuine divination. But what is of philosophical interest for Chrysippus’ theory of fate is in any case not the atomic premiss (P2) but the conditional premiss (P1) and its justification. For the central question is: why and how does the Fate Principle follow from the existence of divination? Any answer to this question has to rely to some extent on conjecture.

One rather simple answer would be that a future event can only be predicted if it has already been settled at the time of the prediction that it will in fact happen. If the future is now undecided as to whether an event will or will not occur, no prediction of it is now possible.<sup>85</sup> The Stoics

<sup>81</sup> Ὡς γὰρ ἐναργούς ὄντος τοῦ πάσας ἀποβαίνειν τὰς τῶν καλουμένων μάντεων προρρήσεις, ἢ ὡς μᾶλλον ἂν ὑπὸ τινος τούτου συγχωρηθέντος τοῦ “πάντα γίνεσθαι καθ’ εἰμαρμένην” καὶ οὐχὶ ὁμοίως ἂν ψευδοῦς ῥηθέντος καὶ αὐτοῦ ἐπειδὴ καὶ τὸ ἐναντίον, λέγω δὲ τὸ μὴ πάντα ἀποβαίνειν τὰ προαγορευθέντα μᾶλλον δὲ τὰ πλείστα αὐτῶν, ἢ ἐνάργεια δείκνυσιν. (*Praep. ev.* 4.3.1).

<sup>82</sup> Τὸ γὰρ ἀποβαίνειν τινὰ κατὰ τὴν ἐνάργειαν, ὣν προλέγουσιν οἱ μάντεις, οὐ τοῦ μαντικῆν ἐπιστήμην εἶναι σημεῖον ἂν εἴη ἀλλὰ τοῦ τυχικῶς συμπίπτειν ταῖς προαγορεύσεσι συμφώνους τὰς ἐκβάσεις (*Praep. ev.* 4.3.3).

<sup>83</sup> Μαντικὴ μὲν ἅπασιν ἀνθρώποις εὐδόκιμος ὡς ἀληθῶς θεῶ συνυπάρχουσα.

<sup>84</sup> Cf. also the above-mentioned Stoic proof from divination to the existence of the gods in *SE M* 9.132, where the atomic premiss is circumscribed as follows, appealing to the universal belief in divination: ‘But it is absurd to do away with such a mass of things (i.e. divination) which are believed in by all human beings.’

<sup>85</sup> We find this thought and similar ones repeatedly in non-Stoic texts.

may well have accepted this idea.<sup>86</sup> However, for our argument it is unsatisfactory, since wanting in two respects: First, it does not involve causation. Hence, although it might justify predetermination in general, it does not suffice to justify that everything happens in accordance with fate alias the Stoic all-embracing network of causes. Second, this argumentation does not prove or explain why, if divination exists, *everything* is predetermined or fated, but it includes only those events which could be predicted; and for the Stoics, these are not all events, but just a very small fraction of them.

As regards the first point, Chrysippus' explanation of the first premiss gets us some part of the way: It is the *truth* of predictions, which follows from the existence of divination, that is claimed to entail the Fate Principle or, more precisely, the truth of the predictions at the time when they are made; and this should remind us once more of the Bivalence Argument. If we ask why the Fate Principle is a necessary condition for the present truth of predictions of the future, the following answer evolves from this argument. For a prediction to be true now, the proposition which the diviner states in order to make the prediction must be true now. This proposition is a proposition about the future. And, according to Chrysippus' reasoning behind the Bivalence Argument, for the truth of such future propositions a causal nexus that extends from the present (i.e. the time when the prediction is made) to the time when the predicted event happens is required. Hence it is a necessary condition for the truth of a prophecy that the event prophesied is causally dependent on a network of causes that has its beginning at the latest at the time of the forecast. Thus part of the reasoning behind the Bivalence Argument serves to back up the present argument, because predictions essentially involve true propositions about the future. It is not at all unlikely that Chrysippus took this line of reasoning; especially since—if we follow Diogenianus—both arguments would have occurred in the same book, i.e. in Chrysippus' first book *On Fate*.

Still, the second difficulty is not yet solved. For, in the case of the Bivalence Argument, the universal validity of the Principle of Bivalence ensured that *every* event is part of the causal network that is fate. But in the case of the present proof only those future events which can or will be predicted, i.e. those for which the gods send signs, have so far been shown to have to be causally predetermined. And if determination by

<sup>86</sup> For instance, it can be read into the Calcidius passage mentioned at the beginning of 2.2: 'And they say that divination proves clearly that the outcomes have been determined long ago. For if no determination preceded, then the seers would not have access to its plan.' (*Tim.* 161 'at vero divinationem dicunt clare demonstrare proventus iam dudum esse decretos; neque enim, nisi decretum praecederet, ad rationem eius accedere potuissent praesagos'. Cf. also *Tim.* 185.)

a causal nexus is a prerequisite only for these future events, it appears that no complete causal determination of *all* events is required, whilst Chrysippus clearly demanded that for the truth of the seers' predictions *everything* has to be fated (passage (1) above, 2.2.2).

However, this conclusion is grounded on insufficient understanding of Chrysippus' conception of fate: For Chrysippus' concept of fate is not that of a multitude of isolated, parallel, causal strings but of a causal network that is connected both vertically, through time, and horizontally, through space (cf. 1.4.2). Hence, if there were an exception to fate, i.e. an uncaused motion, one cannot assume that it would be restricted to one 'causal string'; rather it could have effects in space and time, anywhere, and could in principle be of causal relevance to the predicted events. For the truth of individual predictions this means that it must be ruled out that anywhere in the world some uncaused motion pops up that would *causally* interfere with the predicted event.

Alternatively, Chrysippus could have thought that, since scientific divination is based on universal regularity (2.2.1), one uncaused motion that annihilates the sign-event sequence in one instance may suffice to destroy the existence of *scientific* divination. For even though individual diviners may err in individual predictions, or even in their attempts at identifying divinatory theorems, it is an essential property of any genuine divinatory theorem that it holds without exception in all cases (see 4.2.2).

None of the above suggestions seems forearmed against the possibility of 'local' uncaused motions, in particular uncaused motions that do not causally interfere with events for which the gods send signs—for instance motions whose reverberations simply peter out, or which are localized on a micro level, and have strictly no causally relevant consequences for the level of everyday events. We can only speculate about the Stoic view on locally restricted changes. There are some indications that, rightly or wrongly, the Stoic idea of uncaused motions, or of exceptions to fate, did not allow for the possibility of locally restricted uncaused motions. For they thought that a single uncaused event could in principle 'explode' the world, and that an uncaused event resembles a *creatio ex nihilo*—a change that emerges out of the blue.<sup>87</sup> This suggests they may have thought that if it is possible that there are any uncaused motions, then, because of their very nature, (i) if there could be one such motion somewhere, there could in fact be plenty anywhere, and (ii) that there can be in principle no restriction to the force of such motions and thus to their reverberations in the world. Either way it would be possible that the uncaused motion would affect the prediction, for instance by preventing it from coming true.

<sup>87</sup> Cf. above 1.3.3.



In any event, we can conclude that if one adopts the early Stoic conceptions of logic, scientific divination, fate, and uncaused events, Chrysippus' proof gains a certain plausibility. Note that this understanding of the proof does not make any use of the idea that the signs for some future events are *causally* responsible for the events. For it to be true now that an event will occur later, there must be a causal nexus leading up to it. For it to be predictable by scientific divination now that the event will occur later, there must now be a sign of it. But the sign need not be in any way causally involved; it need not be part of the causal sub-nexus that brings the event about (for details see 4.2.2).

Critics of the Stoics made use of the Stoic theory of divination and its dependency on the Fate Principle. They tried to show up a conflict between divination and that which depends on us (see 4.1). Their arguments—like several other parts of Chrysippus' theory of fate and their discussion—presuppose some acquaintance with Stoic modal theory; and this is the topic to which I turn next.

## Modality, Determinism, and Freedom

A considerable number of our testimonies about the Stoic doctrine of determinism are concerned with modality. In particular the concepts of possibility and necessity were central to some parts of its discussion. It seems that Hellenistic philosophers generally agreed that an action or, in general, activity does not depend on us and is not in our power, if it (or a corresponding proposition) is necessary or impossible; or, put differently, that a prerequisite for something's depending on us is that it is both possible and non-necessary. This fact is invoked both by the Stoics in defence of their theory and in the criticism of their opponents. But in the debate over fate and determinism, modalities played a role in a number of different contexts. They are dealt with separately in the following sections:

- Chrysippus rejected Diodorus' modal theory, because of its built-in necessitarian consequences (3.1.2).
- Chrysippus developed his own set of modal notions, which, in themselves, do not lead to necessitarianism and which secure a necessary condition for that which depends on us (3.1.3–5).
- Some critics of Chrysippus and the Stoics developed arguments to show that there is a conflict between Chrysippus' modal notions and the Stoic theory of fate (3.2).
- Some later Stoics replied to this type of objection by giving an epistemic interpretation of Chrysippus' modal notions (3.3).
- Critics of the Stoics objected that fate, *qua* Necessity, renders all events necessary; but this objection is not justified in Chrysippus' philosophy (3.4).

### 3.1 MODAL LOGIC AND THE THREAT OF DETERMINISM

The question of determinism and freedom has been connected with modal logic at least since Aristotle's *De interpretatione* 9, where we find an allusion to the modal variant of the theory of 'logical determinism'. Its basic idea is that in some way the present truth of future things makes these things necessary (already now) and hence determines them (see also 2.1.2 above). This idea was further developed by the Hellenistic logicians, and

especially by Diodorus Cronus, in arguments such as the Master Argument, and it lay perhaps at the bottom of Diodorus' modal theory. In antiquity Diodorus' modal notions were usually understood as implying unacceptable deterministic consequences. Diodorus' pupil or colleague Philo developed an alternative set of modal notions, but we do not know whether this was in reaction to Diodorus in order to avoid the necessitarian elements of his theory. From the extant texts it is evident that Chrysippus was acquainted with both Philo's and Diodorus' modal notions and also that he designed his own in contrast with those of Diodorus and that he somehow incorporated Philo's. In fact, he combined Philo's and Diodorus' modal notions in a very astute way, making only a minimal change to Diodorus' concept of possibility and thus obtaining a modal system which escapes Diodorus' necessitarian consequences and provides an adequate base for his own compatibilism. The primary purpose of section 3.1 is to clarify the relation between the modal systems of the three philosophers and to expound the philosophical reasons that may have led Chrysippus to modify his predecessors' modal concepts in the way he did.

One major problem in this context is that the Hellenistic concept of propositions, since it includes a temporalized concept of truth, does not lend itself easily to express the necessity or contingency of individual occurrents (which for the Stoics correspond to temporary actualizations of propositions (1.1.3)), and that the ancients had to find ways to get around this difficulty. Modern commentators face the additional difficulty that our secondary sources for Hellenistic modal theories often change freely from talk about modalities of propositions to modalities of that which does or does not happen (*γίγνεσθαι*, *feri*) seemingly unaware of distinctions made in this context by the Hellenistic logicians.

There is another characteristic of the Hellenistic discussion of modalities that one has to keep in mind: the philosophers shared the idea that there is a 'right' modal system which 'fits the world'—or at least that different modal systems can have different degrees of adequacy in describing the world. It is this conception of modal logic that made it an important element in the discussion of determinism and freedom. The 'right' modal theory will specify what is necessary and what is possible in the world and thereby to what extent individual events in the world are necessitated. Here Chrysippus' answer differs from both Philo's and Diodorus'.

### 3.1.1 *Hellenistic modalities in general*

I begin with some remarks about those features which are common to the modal theories of Diodorus, Philo, and Chrysippus. All of them distinguish the four modalities: possibility, impossibility, necessity, and non-necessity. In all three systems the modal notions meet the following four

(for any time *t*)

propositions		
true	false	
possible		impossible
necessary	non-necessary	
	(contingent)	

DIAGRAM 3.1

basic requirements of 'normal modal logic' (cf. Diagram 3.1), although adjustments need to be made owing to the Hellenistic temporalized concept of truth:<sup>1</sup>

- (R1) Possibility and impossibility are contradictory to each other and so are necessity and non-necessity.
- (R2) Necessity and possibility are interdefinable.
- (R3) Necessity entails truth, truth entails possibility, etc.
- (R4) Every proposition is either necessary or impossible or contingent.

Something is taken to be contingent when it is both possible and non-necessary. Some sources, usually in the Peripatetic tradition, employ an alternative requirement for contingency in terms of 'two-sided possibility', viz. the possibility of the thing and its opposite. Since Diodorus, Philo, and the Stoics accept the statement that if something is possible, its contradictory is non-necessary, there is only a difference in formulation here.

The Hellenistic modalities were primarily modalities of propositions (*ἀξιώματα*).<sup>2</sup> A little more needs to be said about these entities here in order to avoid some common misunderstandings. Hellenistic (simple)

<sup>1</sup> (R1)–(R4): cf. Boeth. *Int.* II 234.10–235.4, DL 7.75; Kneale 1962, 125–6; M. Frede 1974, 107 ff. Bobzien 1986, 45 ff. (R2): the interdefinability of the Stoic modal notions has been questioned by Mignucci 1978, Vuillemin 1983, Algra 1995, 289 but see below 3.1.6. (R3): Cic. *Div.* II 61 may be relevant. (R4): for the Stoics see Boeth. *Int.* II 393.14–19. I presuppose that all three philosophers accepted for all propositions the (temporalized) Principle of Bivalence ( $\forall, (T_t[p] \vee F_t[p])$ ) and some (temporalized) version of the Law of Excluded Middle. For the Stoics cf. Simp. *Cat.* 406.34–407.5, Cic. *Fat.* 20–1.

<sup>2</sup> On their being modalities of propositions see DL 7.75 (*ἀξιώματα*), Boeth. *Int.* II 234.11 (*enuntiationis*), 393.14 f (*enuntiationes*). But cf. note 8 below for Diodorus and Philo.

propositions can state something about the past, present, or future.<sup>3</sup> Typical Hellenistic examples of simple propositions are 'it is day', 'Dio is taking a walk', 'Dio will go to Megara'. (Almost all examples that survive are singular propositions.)

In principle, the same proposition can be used, at different times, for different events. The proposition 'Dio is taking a walk' has at least as many actualizations as there are walks Dio takes. And it is these actualizations of the propositions that correspond to the individual occurrents of Dio's walks. Few examples of propositions in Hellenistic logic can have only one actualization. Those which do usually describe unique events, such as a person's death: human beings have only one life to lose. There are no early Hellenistic examples of 'dated propositions' as e.g. 'Thea takes a walk from 2 p.m. to 3 p.m. on 6 January 1999'. These would be ideal for stating individual occurrents, but dated propositions seem not usually to have been used for this purpose.<sup>4</sup>

As said above (in 1.1.3), for the Stoics truth and falsehood are not atemporal properties of propositions but belong to them 'at a time'. The proposition 'it is day' is true precisely if and when it is daytime (DL 7.65); at night it is false. The proposition 'it will be day' is true *now* if at some time later than *now* it will be day, and the proposition 'it was day' is true *now* if at some time earlier it was day. As thus becomes apparent, for Hellenistic atomic propositions about past or future the truth-criteria contain, at least implicitly, a quantification over time. ('Thea will take a walk' is true if and only if there is a future time *t* at which Thea takes a walk.)<sup>5</sup> The case of propositions which contain time indexicals is more complex.<sup>6</sup> As a consequence of this temporalized concept of truth, many Hellenistic propositions change their truth-value over time; 'it is day' for instance changes its truth-value twice daily. These propositions were called 'changing propositions' (*μεταπίπτοντα*).<sup>7</sup>

<sup>3</sup> Cf. Cic. *Fat.* 1 and 14, Chrysippus, *Δογ. Ζητ.* frs I–III, col I–II, Epict. *Diss.* 2.19.1–3, SE *M* 8.254–6, Simp. *Cat.* 406.34–407.3, cf. also 2.1.1.2.

<sup>4</sup> But cf. Cic. *Fat.* 19 'Morietur Epicurus, cum duo et septuaginta annos vixerit, archonte Pytharato', as a later example of this kind.

<sup>5</sup> There is a problem with propositions about the future: what happens to 'Dio will die' at the time when he dies? does it turn false, or does it have to be reformulated as 'Dio is dying' and thereafter as 'Dio has died'? See Bobzien 1993, 65, in particular n. 5.

<sup>6</sup> I assume that in the case of propositions with time indexicals the truth-criterion time is restricted to the time referred to by the indexical; i.e. 'Thea will take a walk tomorrow' is true *now* if there is a time tomorrow at which Thea takes a walk; 'Thea took a walk last year' is true *now* if there was a time last year at which Thea took a walk. Further, I take it that 'Thea will take a walk tomorrow' will be true today and false tomorrow if she takes a walk tomorrow but not the day after; cf. Alex. *Fat.* 177.7 ff.

<sup>7</sup> Cf. DL 7.76. (cf. M. Frede 1974, 44 ff.; Bobzien 1986, 21 ff.); actually, most examples of Hellenistic atomic propositions are *μεταπίπτοντα*, for Diodorus and Philo as well as for the Stoics (cf. SE *M* 8.87–end and *PH* 2.104–203; DL 7.65–82; Plut. *Stoic. rep.* 1055f).

It will prove useful for what follows to distinguish between the time of assertion of a proposition (which for reasons of convenience I will henceforth call *now*—although this *now*, of course, runs over all ‘real’ points of time, as it were), and the time the truth-criterion is concerned with. In the case of propositions about the present this latter time is the same as *now*; for propositions about the future it is the future relative to *now* and for propositions about the past it is the past relative to *now*.

Back to the Hellenistic modal theories: it seems that Stoic modalities were properties of propositions (like truth and falsehood) rather than operators.<sup>8</sup> One thing that makes this clear, and will become apparent in the following, is that when the Stoics say that a proposition is possible, they do not mean that it is possibly true. Their modalities are not ‘alethic’ in this immediate sense. Furthermore, the Hellenistic modalities are temporalized in the same way as the truth-values: a proposition is possible-at-a-time-*t* or possible-*now*, etc. But if Hellenistic modalities were properties of *propositions*, how could they have been seen as responsible for the determinedness of *events* or alternatively as a necessary condition for a compatibilist theory? There seem to be several problems here.

First—and usually overlooked—there was no straightforward way of formulating propositions that state individual occurrents (see above). However, clearly the Stoics considered those things that are fated (occurrents, i.e. movements, qualitative states, events (*γυγνόμενα*), see 1.1.2, 1.1.3) as individual events; and those things that depend on us (actions, activities, omissions), and for which we can be held responsible, were at the very least seen as correlated to individual events. We can hence anticipate some difficulties in the Hellenistic discussion of the determinedness of events in terms of modalities of propositions.

Second (and in particular given the previous difficulty), why did Hellenistic philosophers not discuss the question of predetermination and modalities by directly discussing modalities that are properties of events? For the Stoics their particular concept of a proposition may help to explain this. For them events or occurrents (*qua* effects) closely correspond to a subclass of the actualizations of propositions or propositions-while-they-are-true (cf. also 1.1.3; 2.1.1); their ontological status is subsistence (*ὑπάρξις*), just like that of actualizations of propositions. But there is no such subclass with any comparable ontological status for *non-actualized*

<sup>8</sup> Cf. the formulations in DL 7.75, Boeth. *Int.* II 234–5, Alex. *An. pr.* 177. (Propositions of the type ‘It is possible that Dio is walking’ are *never* discussed.) If one follows Boeth. *Int.* II 234, and Epict. *Diss.* 2.19.1–5 this would be true of Diodorus’ and Philo’s modalities as well. However, as both passages seem to stem from Stoic sources and we have grounds to assume that Chrysippus or a later early Stoic listed the modal sets from Diodorus and Philo alongside Chrysippus’, this could be simply the result of ‘assimilation’ of those modalities to Stoic standards.

occurables,<sup>9</sup> i.e. for states of affairs that if they were actualized would be occurrents (nor in general for states of affairs that do not obtain), and the Stoics have no technical expression for them. Yet, in the Hellenistic discussion of modalities, the concepts of impossibility and counterfactual possibility (the possibility of something that does not occur) was central. Thus it becomes comprehensible why the Stoics discussed modalities primarily as properties of propositions: there were no other entities with positive ontological status that could be bearers of the modalities of impossibility and counterfactual possibility. The Stoics had within their ontology no other direct way to talk about the modalities of that which does not happen or does not obtain.

Thus for the (early) Stoics it seems that there is only one kind of modalities, and that these modalities belong to propositions (*ἀξιώματα*).<sup>10</sup> And because of their temporalized concept of truth and the absence of dated propositions, there is no direct way of talking about the modalities of particular things that do occur or that do not occur. Accordingly, as all our sources confirm, the Hellenistic philosophers devised special ways in which to make the connection between modalities of propositions and of the determinedness of individual events.

In the next sections the modal notions of the three philosophers are introduced separately. In the case of Diodorus and Philo, I concentrate on those features of their modalities that are germane to the question of determinism and to the comparison with Chrysippus' modalities.

### 3.1.2 *Diodorus and necessitarianism*

The full set of Diodorus' modal definitions is only reported by Boethius (*Int.* II 234.22–6). The definition of possibility is confirmed in some other commentators on Aristotle,<sup>10</sup> and we have further valuable information about Diodorus' modal theory in Epictetus, Cicero, and Plutarch.<sup>11</sup> According to Diodorus, a proposition is possible if and only if it either is true or will be true; it is impossible if, being false, it will not be true; necessary if, being true, it will not be false, and non-necessary, if it either

<sup>9</sup> I use the term 'occurable' in order to denote things/states of affairs that either are occurrents (actualized occurables) or would be occurrents if they were actualized (non-actualized occurables).

<sup>10</sup> Some of the sources on Stoic modalities talk about modalities as modalities of things that happen (*γίνεσθαι, fieri*) and things that do not happen, or of individual events (*γινόμενα*) or of *res* (e.g. Plut. *Stoic. rep.* 1055d–f in part; Cic. *Fat.* 12–15 in part, Alex. *Fat.* ch. 10 in part; *Quaest.* I 4.1; Simp. *Cat.* 195). However, none of these authors is Stoic, and they may all be simply lax in their formulations and influenced by later or by Peripatetic ways of talking about modalities.

<sup>11</sup> For further information see Epict. *Diss.* 2.19.1–5, Cic. *Fat.* 12, 13, 17, and *Fam.* IX 4, Plut. *Stoic. rep.* 1055e–f. For the definition see Alex. *An. pr.* 183.34–184.6, Philoponus, *An. pr.* 169.17–19, Simp. *Cat.* 196.4–6, Boeth. *Int.* II 412.16–17.

is now false or will be false.<sup>12</sup> The definition of the possible is perfectly illustrated by the example given in Alexander:

According to him <i.e. Diodorus> ‘I am in Corinth’ would be possible if we assume that either I am in Corinth or, in any event, I will be <in Corinth>. If we assume that I am not <i.e. ever in Corinth> it would not be possible either.<sup>13</sup> (*An. pr.* 184.2–4)

Making explicit the time-relatedness of the definitions we can hence say that a proposition is Diodorean possible *now* if it is true at least once from *now* on. If it is false at least once from *now* on it is non-necessary. Continuous truth from *now* on makes it necessary, continuous falsehood from *now* on makes it impossible. The Diodorean modality of a proposition at a time hence depends on the range of truth-values which that proposition has from that time onwards.<sup>14</sup>

But why do Diodorus’ modal definitions refer only to ‘present and future’ or ‘the time from *now* on’? Why is something not possible *now* precisely if it is at some time, present or future or *past*, the case (and necessary *now* precisely if it is at all times, present, future, and *past* the case)?

<sup>12</sup> Cf. Boeth. *Int.* II 234.22–6: ‘Diodorus possibile esse determinat, quod aut est aut erit, impossibile, quod cum falsum sit non erit verum; necessarium, quod cum verum sit non erit falsum; non necessarium, quod aut iam est aut erit falsum.’

<sup>13</sup> *Τὸ γὰρ ἐμὲ ἐν Κορίνθῳ γενέσθαι δυνατόν κατ’ αὐτόν, εἰ εἴην ἐν Κορίνθῳ, ἢ εἰ πάντως μέλλοιμι ἔσεσθαι· εἰ δὲ μὴ γινοίμην, οὐδὲ δυνατόν ἦν.* Simplicius understands it in the same way: for Diodorus it is possible that something is known if it either is or will be known (*Cat.* 196.4–5).

<sup>14</sup> Since for some the comparison between the three sets of modal concepts may be facilitated if the definitions are put in a slightly more formal guise, I add formalizations (or abbreviations, they are really nothing more) in footnotes.

I use  $T_t[p]$  and  $F_t[p]$  in order to symbolize ‘ $p$ ’ is true-at-the-time- $t$ ’ and ‘ $p$ ’ is false-at-the-time- $t$ ’, with  $p$  standing for Hellenistic propositions about past, present, or future as introduced above. The index  $n$  stands for ‘*now*’ (e.g.  $T_n[p]$  for ‘ $p$ ’ is true-*now*).  $M_n[p]$  is used for ‘(the proposition) “ $p$ ” is possible-*now*’ and  $L_n[p]$  for ‘“ $p$ ” is necessary-*now*’. (Note that for  $p$  in each case Hellenistic propositions about the present, the past, and the future can be substituted. However, the case of propositions with time-indexicals like ‘tomorrow’ is more complex. See below, n. 43.)

(D/M)	$M_n[p]$	$=_{df}$	$\exists, (t \geq n \wedge T_t[p])$
(D/ $\neg$ M)	$\neg M_n[p]$	$=_{df}$	$\forall, (t \geq n \rightarrow F_t[p])$
(D/L)	$L_n[p]$	$=_{df}$	$\forall, (t \geq n \rightarrow T_t[p])$
(D/ $\neg$ L)	$\neg L_n[p]$	$=_{df}$	$\exists, (t \geq n \wedge F_t[p])$

The positioning of the time index in  $M_n[p]$  etc. (‘“ $p$ ”-no-time-index is possible-*now*’ etc.) is not accidental.

$M_n p_t$	(it is possible- <i>now</i> that $p$ -at- $t$ )
$M p_n$	(it is possible-no-time-index that $p$ - <i>now</i> )
$M p_t$	(it is possible-no-time-index that $p$ -at- $t$ )

or the reading of  $M_n[p]$  as ‘“ $p$ ” is possibly true-*now*’ all lead to nonsense in the case of Diodorean and Chrysippean modalities, as should become clear in the following. The reading of  $M_n[p]$  as ‘it is possible-*now* that “ $p$ ” is true-atemporally’ does not square with the Hellenistic concept of truth.



A fully satisfactory answer can perhaps not be given. But it is worth noting that there is at least one common usage of modal expressions which is exclusively concerned with present and future, and that this use is relevant to the discussion of the determinedness and indeterminateness of events. Often, when we want to know whether something is possible or impossible we want to know something about its future (plus present) chances of being the case. If there was an event of a certain kind in the past which made a proposition true in the past (i.e. if there was an actualization of the proposition in the past), but for the future it is definitely precluded that an event of that kind will make the proposition true again (that there will be another actualization of it), we do not any longer want to call such a proposition possible in this sense. Take for instance the proposition 'Dio is walking' and assume that Dio died last Sunday. Then—in this sense of being possible—we would no longer want to say that 'Dio is walking' is possible or that it is possible for Dio to walk, even if Dio had taken plenty of walks over the last 87 years. (What we would do instead is move our reference point back in time and say '“Dio is walking” was possible' or 'It was possible for Dio to walk'—and in the case of Diodorus' modalities this works as well.) It becomes clear immediately that this use of modal-expressions is pertinent to the question of determinism, when one substitutes 'it is in Dio's power' for 'it is possible for Dio'. In general, when one states that something is in someone's (or something's) power, one is usually concerned only with the present and future capability of that person (or thing). Diodorus' restriction of the time span relevant to a proposition's modality to present and future hence becomes comprehensible if one connects it with this usage of modal expressions which in Hellenistic philosophy is of relevance in particular to the discussion of determinism.

The particular time-relatedness of the Diodorean modalities has some further consequences for his modal theory: First, the modal requirement that a necessary proposition must be always true (see above (R3)) is preserved, if 'always' is understood as 'always from *now* on'. Then, propositions can change their Diodorean modalities over time—but only from contingency to necessity or impossibility; this is borne out to a certain extent by common language use, as the above example made clear. The reason for the restriction on possible changes is that if a proposition is always true (false) from a certain time *now* onwards, then at all times *t* after *now* the proposition will always be true (false) from *t* onwards. This is easily exemplified with the true 'Dio walked' or the false 'Dio will walk'. Once a proposition has become necessary or impossible it hence can no longer change its modality.

A consequence of this is that for Diodorus all true simple propositions about what happened in the past are necessary, which is one of

Diodorus' three assumptions in the Master Argument.<sup>15</sup> However, it does not follow from this that for Diodorus all false propositions about what happened in the past are impossible (cf. *now* the presumably false 'I have finished reading this chapter'). On the other hand, all false propositions about what will happen in the future turn out impossible, and this point was picked up by Diodorus' critics.<sup>16</sup>

Another most important consequence is that, although the modalities depend solely on a proposition's range of truth-values, Diodorus' system does not collapse into a non-modal system.<sup>17</sup> The class of contingent propositions is not empty. A proposition is Diodorean contingent precisely if it is Diodorean possible and non-necessary. In other words, a proposition is Diodorean contingent *now* if and only if from *now* onwards it will be true at some time and false at some time.<sup>18</sup> That is, exactly those propositions which change truth-value in the future are Diodorean contingent. Examples are 'it is day', which is true (or false) *now* and will be false (or true) later, and 'I am talking'.

So, obviously, in Diodorus' modal logic contingency is not precluded (and this cannot have been the point of the ancient dispute). But it does not follow that because of this his modal theory is also indeterministic. In Diodorus we have contingency, but there are certain cases of contingency which are logically impossible, and these are exactly those of interest in the debate over determinism: viz. there can be no contingent proposition for which it holds that it is true at the present-or-future time  $t$  (possibility criterion) and it is false at the present-or-future time  $t'$  (non-necessity criterion), and  $t$  is identical with  $t'$ .<sup>19</sup> For this would mean that there is a present-or-future time at which the same proposition is both true and false, and, on the assumption that Diodorus accepts the temporalized Principle of Bivalence, this cannot be—for logical reasons.

This implies that propositions that state what occurs at some particular present or future time can be only either Diodorean non-necessary (in which case they are also impossible) or Diodorean possible (in which case they are also necessary) but never both. For instance, the proposition 'Dio is walking from 4 p.m. to 5 p.m., 16 January 1996' cannot be Diodorean

<sup>15</sup> The statement does not cover true propositions such as 'I've never been to Megara' or 'I've not participated in the Olympic Games', which do not state what has happened, but rather what has (so far) not (ever) happened.

<sup>16</sup> What happens to true propositions about what happens in the future depends on what one takes their truth-conditions to be, cf. above, n. 5.

<sup>17</sup> As would a system built on a concept of possibility like the Megaric one in Arist. *Met.*  $\Theta$  1046<sup>b</sup>29 (an event or activity is possible only at those times at which it is actual). For a suggestion of how Diodorus' modal notions are related to this Megaric concept and could have developed from it, see Bobzien 1993, 70–3.

<sup>18</sup>  $(D/C) \quad C_n[p] =_{df} (\exists, (t \geq n \wedge T_t[p])) \wedge (\exists, (t \geq n \wedge F_t[p]))$ .

<sup>19</sup> i.e. it is ruled out that  $\exists, (t \geq n \wedge (T_t[p] \wedge F_t[p]))$ .

contingent, as this would mean that Dio would have both to walk and not to walk simultaneously. And so in all such cases—which include all cases of occurables. (On the other hand the Hellenistic example ‘Dio is walking’ could be Diodorean contingent. There could be a present-or-future time at which Dio walks and another present-or-future time at which he does not walk.) But determinism and indeterminism are concerned with what does and what does not occur at particular times (i.e. with occurables). And no proposition that states such things can be contingent for Diodorus. Hence Diodorus’ modal system, although it allows for contingent propositions, is—in fact—not one iota less ‘deterministic’ than modal systems in which possibility entails necessity and non-necessity entails impossibility.<sup>20</sup>

I call occurables that are not actualized, but possible, counterfactual possibilities; and occurables that are actualized (events, changes, qualitative states—i.e. occurrents) and non-necessary factual non-necessities. For Diodorus there are hence no counterfactual possibilities and no factual non-necessities.

Chrysippus, among others, recognized this and thought that Diodorus’ concept of possibility posed a threat to human freedom and to that which depends on us—at least this is implied by Cicero *Fat.* 12–14.<sup>21</sup> Thus we can understand why Chrysippus did not take over Diodorus’ concept of possibility. But we have to be careful here. For dated propositions like ‘Dio is walking from 4 p.m. to 5 p.m., 16 January 1996’ were not part of the ancient ‘standard ontology’ and ‘terminology’ (cf. above 3.1.1), and so the contingency relevant to the question of determinism could not be singled out simply by adducing such propositions as examples. So even if Chrysippus and others ‘sensed’ unwanted deterministic consequences of Diodorus’ modal logic—how could they have expressed this? How could *they* have argued that the Diodorean concept of possibility is a threat to freedom? They could *not* invoke the claim that for Diodorus every true proposition is necessary and every false one impossible in order to argue that for Diodorus everything that happens is necessary. For, as we have seen, this is not true. Diodorus’ system allows for contingency: ‘Dio is walking’ will be contingent as long as Dio will take another walk. So Chrysippus could not (straightforwardly) accuse Diodorus of endorsing necessitarianism or the necessity of everything that occurs. This is borne out by the striking fact that none of our testimonies claims that *universal* determinism is a consequence of Diodorus’ modal logic.

<sup>20</sup> Pace Denyer 1981a, 52–3.

<sup>21</sup> . . . Omne ergo quod falsum dicitur in futuro, id fieri non potest. At hoc, Chrysippe, minime vis, maximeque tibi de hoc ipso cum Diodoro certamen est etc. For a detailed discussion of this passage see Ch. 4. Cf. also Plut. *Stoic. rep.* 1055e–f, Boeth. *Int.* II 235.

For Diodorus it is not the case that *all* true propositions are necessary and *all* false propositions impossible; only those (of the relevant) propositions are Diodorean impossible which state something that will never occur (or will never occur again). These propositions form a proper subclass of false propositions. Hence only the possibility of propositions that state things that will never occur (again) is threatened directly by Diodorus ('directly' in the sense that they come out as Diodorean impossible).

If Diodorus' opponents used only the Hellenistic concepts of proposition and temporalized truth, and no dated propositions, then, in order to make the deterministic consequences of Diodorus' modalities apparent (i.e. that they rule out counterfactual possibilities and factual non-necessities), they had to come up with examples of propositions about something that will never occur (again) and that was by common sense considered as a counterfactual possibility. And that is exactly what the ancients, including Chrysippus, did.

One way of doing this is by picking out things that can occur only once. Cicero's notorious example 'Fabius will die on land' (or 'Fabius dies on land'—the tense does not matter here) is such a case.<sup>22</sup> As human beings die only once, if this proposition is false, it is Diodorean impossible. Examples of things that are not intrinsically unique in this way require the extra assumption 'and it neither does nor ever will occur'. And indeed, our sources tend to state some such proviso.<sup>23</sup>

For instance, take 'Thea goes to Megara' and assume that, as a matter of fact, she never goes there. Then, even if she is just deliberating or trying to decide whether or not to go, it is not Diodorean possible for her to go. It is Diodorean impossible.<sup>24</sup> Our testimonies all back up their (explicit or implicit) criticism that Diodorus' modalities lead to determinism with arguments and examples of this kind; they focus only on the impossibility of that which never happens. The same result can be reached by focusing on false propositions about the future which correspond to future counterfactual possibilities. For in Diodorus' theory, all false propositions about what happens in the future are impossible (see above). This is so, since here the element of quantification over time ('never', 'never again') is part of the truth conditions. If 'Dio will take a walk' (not containing a time indexical like 'today') is false this entails that

<sup>22</sup> Cf. Cic. *Fat.* 12–14; Plut. *Stoic. rep.* 1055e–f; discussed in Ch. 4.

<sup>23</sup> e.g. 'This gem will break' is said—contrary to Diodorus' modalities—to be possible *even if it never happens* (Cic. *Fat.* 13 'ut frangi hanc gemmam, etiamsi id numquam futurum sit'); 'I am in Corinth' is said to be Diodorean impossible *if I am not ever in Corinth* (see quote above); and 'This one will go to Megara' is implied to be Diodorean impossible *if this one is prevented from ever going there*. (Plut. *Stoic. rep.* 1055f, with the assumption that he will never go.)

<sup>24</sup> If, on the other hand, one assumes that Thea will go to Megara, in, say, 10 years time, then 'Thea goes to Megara' is in fact *now* Diodorean possible.

he will *never* again take a walk. (It will be Diodorean impossible, since it is false and will never be true.) This is how Chrysippus must have reacted, as is implied by Cic. *Fat.* 12–14 (see 4.1.5).<sup>25</sup>

We can hence conclude—fully in accord with the surviving passages—that Diodorus’ modal notions were not criticized for leading to universal necessitarianism, i.e. to the theory that ‘everything is necessary’—for that it is day, for instance, is not Diodorean necessary. Rather what was found unacceptable was that whatever in fact never happens is impossible (or alternatively that all false propositions about what happens in the future are impossible). This was the only straightforward way, within Hellenistic logic, to express the thought that Diodorus’ modalities preclude counterfactual possibilities. But this is surely enough to worry not only a libertarian but also a ‘soft determinist’ such as Chrysippus. So Chrysippus, since he wanted to retain ‘counterfactual possibilities’, had to reject Diodorus’ modal concepts. And he did this, as is well known, by attempting to refute the Master Argument, i.e. the argument with which Diodorus established his notion of possibility as the (only) right one.<sup>26</sup> Still, the question remains: what concept of possibility should Chrysippus adopt instead? One choice he had was Philo’s.

### 3.1.3 *Philo and conceptual or essentialist modalities*

Philo’s modal definitions are the least well reported, and their exact meaning cannot be reconstructed with certainty. As in the case of Diodorus, only Boethius gives all four definitions (*Int.* II 234.10–22). The other three sources, all Aristotle commentators as well, confine themselves to Philo’s notion of possibility, contrasting it with others.<sup>27</sup> In the following I rely primarily on Boethius. Apart from the fact that the passage gives the complete set of modal definitions, it also seems to originate from a Stoic text and to present Philo’s modal notions in the way the Stoics understood them—which is what is in the end of interest here, even if it should differ slightly from the original formulation. Here is Boethius’ report:

Philo says that <a proposition> is possible which is capable of truth according to the proposition’s own nature . . . In the same way Philo defines that which is necessary as that which, being true, as far as itself is concerned, can

<sup>25</sup> The fact that Diodorus’ modal concepts also logically rule out the case of factual non-necessities is more difficult to capture in Hellenistic logic, without the help of dated propositions. As I said above, if we assume there are future times at which Dio is talking, and others at which he is not talking, ‘Dio is talking’ would be Diodorean contingent, although any dated proposition that truly states that Dio is talking at some particular time would be necessary.

<sup>26</sup> For Chrysippus’ refutation of this argument see e.g. Bobzien 1986, 105–13.

<sup>27</sup> Alex. *An. pr.* 184.6–10; Philoponus, *An. pr.* 169.19–21; Simp. *Cat.* 195.33–196.2.

never be capable of falsehood. That which is non-necessary he determines as that which, as far as itself is concerned, is capable of falsity; and that which is impossible as that which, according to its own nature, can never be capable of truth.<sup>28</sup> (*Int.* II 234.10–21)

Thus, it seems, what is required for Philonian possibility is some sort of intrinsic consistency of the proposition. The propositions '(this) piece of wood burns' (*Simp. Cat.* 196.1), 'Diocles is alive', 'it is night' would all be consistent in this sense. Evidence is too sparse and heterogeneous to allow us to give a clear idea of the type of consistency Philo had in mind, in particular whether it was regarded as conceptual or as essentialist.<sup>29</sup> Hence I leave the concept of consistency uninterpreted, even though for the question of determinism it may be relevant in which way Philo intended it.

Certainly consistency generally is a common and reasonable criterion for possibility. Still, owing to the temporalized concept of truth, it works differently for Hellenistic propositions than for atemporal ones. In the case of an atemporal concept of truth the account would be understood simply as: 'a proposition is possible if and only if it is capable of being true (atemporally)',<sup>30</sup> and we would think of examples such as 'triangles are square' or 'at noon 21 August 1957 Diotima is walking through Athens'.

On the other hand, in the case of temporalized truth (being true at *t*), one must ask: internally capable of being true-*at-what-time(s)* or *when*? There is no such thing as 'just being true (atemporally)'. And although we know very little about Philo's concept of truth, certainly his concepts of modality and of the conditional were discussed by later philosophers and in particular by the Stoics as if his concept of truth was temporalized (3.1.4). The most straightforward way of adding the (implicit) time reference to the definiens of possibility is by understanding it as 'capable of being true-*at-some-time*'. Take as a proposition of the Hellenistic type 'Dio is dying of rabies'. It is Philonian possible if it is capable of being at some time true. It would presumably not be capable of being true-at-all-times,

<sup>28</sup> Philo enim dicit possibile esse quod natura propria enuntiationis suscipiat veritatem . . . eodem autem modo idem ipse Philo necessarium esse definit quod cum verum sit, quantum in se est, numquam possit susceptivum esse mendacii. Non necessarium autem idem ipse determinat quod quantum in se est possit suscipere falsitatem. Impossibile vero, quod secundum propriam naturam numquam possit suscipere veritatem.

<sup>29</sup> Take e.g. the possibility of 'this wood is burning'. Philo may have had in mind that the *concept* of burning wood is consistent; or that the *essence* or nature of wood is such that it is capable of burning; or still something else. (Alexander, at *An. pr.* 184.6–10, reports as Philonian criterion for possibility the 'suitability of the subject' (ἐπιτηδεύτης τοῦ ὑποκειμένου).)

<sup>30</sup> Referring to the uninterpreted internal consistency or capability of truth as "*p*" is internally capable of being true' and abbreviating CAP T[*p*] one can formalize:

$$M[p] =_{at} CAP T[p]$$

because Dio could not die of rabies at all times, in fact, he could not even die of rabies twice.<sup>31</sup> In order to make visible this temporalization of truth, I reformulate Philo's definitions:<sup>32</sup>

A proposition is possible (*now*) if and only if it is internally capable of being at some point true.

A proposition is impossible (*now*) if and only if it is not internally capable of being ever true.<sup>33</sup>

A proposition is necessary (*now*) if and only if it is not internally capable of being ever false.

A proposition is non-necessary (*now*) if and only if it is internally capable of being at some point false.

Despite the temporalized concept of truth, it should be possible to ascertain the Philonian modality of a proposition by simply contemplating the proposition itself, as the definitions do not contain references to any specific time or circumstances. And we are told that it is Philonian possible for some straw to burn even at times when it rests at the bottom of the ocean (Alex. *An. pr.* 184.6–10); hence the particular circumstances in which the proposition is uttered seem not to matter for its modality. This suggests that a proposition, even if it changes its truth-value, will not change its Philonian modalities.<sup>34</sup>

It should be plain from the above formulations of the modal accounts that for Philo the following two logical principles hold, which also held—in a qualified way—for Diodorus:

<sup>31</sup> This is the most plausible way I have found to do justice both to the temporalized nature of truth and to our general information about Philo's modalities. But there are others, e.g. 'capable of *being-true-at-some-time-from-now-on*'. (The alternative 'capable of being *now* true' can be ruled out since it would lead to unacceptable results in the cases of necessity and impossibility.)

<sup>32</sup> Formalized, Philo's definitions then become

(P/M)	$M_n[p]$	$=_{df}$	$CAP \exists_t T_t[p]$
(P/ $\neg$ M)	$\neg M_n[p]$	$=_{df}$	$\neg CAP \forall_t T_t[p]$
(P/L)	$L_n[p]$	$=_{df}$	$\neg CAP \forall_t F_t[p]$
(P/ $\neg$ L)	$\neg L_n[p]$	$=_{df}$	$CAP \exists_t F_t[p]$

It cannot be made out from the sources whether Philo's modalities were temporalized, like those of Diodorus and Chrysippus; hence, whether to write  $M_n[p]$  or just  $M[p]$ , etc. Such time-relatedness *must*, however, be assumed for the Philonian accounts when they form part of Chrysippus' modal definitions (see 3.1.4). And this is of primary interest here.

<sup>33</sup> Perhaps the formulation of the necessity and impossibility criterion in Boethius as 'is *never* capable of falsehood/truth' (*numquam*) is an attempt at expressing this. In any event the 'never' makes little sense with an atemporal concept of truth.

<sup>34</sup> Whether the circumstances are never in any way relevant for the Philonian modalities and hence whether changes of modality could never occur depends in the end on factors about which our sources are silent. Thus we might wonder whether 'Socrates will die' is still Philonian possible once Socrates is dead and 'Dio is teething' when Dio has just celebrated his 87th birthday. Should any such propositions turn out not to be Philonian possible, the account would have to be changed to something like:

(P/M)	$M_n[p]$	$=_{df}$	$CAP_n \exists_t T_t[p]$
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- (P1) A necessary proposition is true at all times.  
 (P2) An impossible proposition is false at all times.

For if  $p$  is not internally capable of being ever false, then  $p$  is always true,<sup>35</sup> and if  $p$  is not internally capable of being ever true, then  $p$  is always false.<sup>36</sup> But for Philo it also holds that

- (P3) A proposition can be possible and still always false.<sup>37</sup>

For in terms of his modalities this means that a proposition can be (internally) capable of being at some time true, and nevertheless be always false. Philo's modal system thus does not preclude counterfactual possibilities. The principle (P3) did not hold in Diodorus' modal system. This point was used to show up the necessitarian consequences of Diodorus' system. The importance of (P3) for the debate over determinism is confirmed by the fact that three of our four sources stress the fact that Philo held it. For instance, it is said that '(this) piece of wood burns' is possible for Philo even if the wood will never burn (Simp. *Cat.* 195.33–196.2).

We can now attempt to answer the question why Chrysippus—given that he thought Diodorus' modal system inadequate, because it rules out counterfactual possibilities—did not just take over Philo's modal system. As we have seen, for Philo there are possible propositions which are never true (P3). Hence Philo's modal notions do not annul counterfactual possibilities. They seem, in fact, unfit to suggest any kind of determinism at all. However, on the other hand, Philo's modal notions are also compatible with any kind of physical determinism, as they do not seem to supply any information about circumstances, but only allow a classification of (individual things that may occur *qua* belonging to) certain types of things that may occur. 'Dio is walking' is Philonian possible if there is nothing internally inconsistent in the fact of Dio's walking—external circumstances are disregarded. This point is again stressed in most of our sources.<sup>38</sup> So we can surmise why Chrysippus was not content with Philo's modal notions either. He may have thought that in the 'true' modal system the modalities of a proposition must depend also on the particular circumstances in the world. We can easily imagine Chrysippus pondering the absurdity that for Philo 'Dio is walking' is possible even if Dio has been permanently paralysed, or—to take a Philonian example from our sources—that chaff can burn even if it lies deep down at the bottom

<sup>35</sup>  $\neg \text{CAP } \exists, F_i[p] \rightarrow \forall, T_i[p]$

<sup>36</sup>  $\neg \text{CAP } \exists, T_i[p] \rightarrow \forall, F_i[p]$

<sup>37</sup> (P3)  $\neg ((\forall, F_i[p]) \rightarrow \neg M_n[p])$

Correspondingly, there can be Philonian non-necessary propositions which are always true:

(P4)  $\neg ((\forall, T_i[p]) \rightarrow \neg L_n[p])$

<sup>38</sup> Cf. the expressions  $\psi\iota\lambda\acute{\eta}\nu$  (Alex. *An. pr.* 184),  $\mu\acute{o}\nu\eta\eta$ ,  $\psi\iota\lambda\acute{\alpha}\varsigma$  (Simp. *Cat.* 195.33, 196.16) and 'si nil extra prohibeat' (Boeth. *Int.* II 234.13–14).



of the sea (Alex. *An. pr.* 184.6–10; cf. Simp. *Cat.* 196.1–2). Chrysippus may have decided that for Dio then it is *no longer possible* to walk and that that chaff at the bottom of the sea (at least if it is there until it rots) *cannot* burn, and that a modal system has to account for such cases.

### 3.1.4 Chrysippus' modal system

So, for Chrysippus, Diodorus' modal system does not generate enough contingent propositions and Philo's generates too many. Being a logician of his calibre Chrysippus' reaction was predictable: he introduced his own modal concepts—finally the 'right' ones. They have been preserved for us, if with some gaps, by Diogenes Laertius and Boethius.<sup>39</sup> Here is a reconstructed version:

A proposition is possible if it is capable of being true, and not hindered from being true by external circumstances.

A proposition is impossible if it is not capable of being true, <or is capable of being true, but is hindered by external circumstances from being true.>

A proposition is necessary if it is not capable of being false, or is capable of being false, but is hindered by external circumstances from being false.

A proposition is non-necessary if (even <if> it is true) it is capable of being false, and not hindered <from being false> by any external circumstances.<sup>40</sup> (DL 7.75)

Thus understood, the accounts of possibility and non-necessity are conjunctions, those of impossibility and necessity disjunctions, and the inter-definability of the modal concepts is preserved. Every account consists of two parts (conjuncts or disjuncts).

The *first parts* of Chrysippus' accounts look very similar to Philo's; in Boethius they are formulated in the very same words.<sup>41</sup> As Chrysippus surely

<sup>39</sup> The *testimonia* on the modal theory of Chrysippus and the Stoics in general are: DL 7.75; Boeth. *Int.* II 234–5, 393; Plut. *Stoic. rep.* 1055d–f; Cic. *Fat.* 12–15; Epict. *Diss.* 2.19.1–5; Alex. *Fat.* ch. 10, *Quaest.* I 4.1, *An. pr.* 177.25–178.7; and perhaps Simp. *Cat.* 196.2–4. As for [Plut.] *Fat.* 570f, I doubt that it gives a Stoic account.

<sup>40</sup> Δυνατὸν μὲν <ἔστιν ἀξίωμα> τὸ ἐπιδεκτικὸν τοῦ ἀληθὲς εἶναι τῶν ἐκτὸς μὴ ἐναντιουμένων εἰ τὸ ἀληθὲς εἶναι. . . ἀδύνατον δὲ ὁ μὴ ἔστιν ἐπιδεκτικὸν τοῦ ἀληθὲς εἶναι <ἢ ἐπιδεκτικὸν μὲν ἔστι, τὰ δ' ἐκτὸς αὐτῷ ἐναντιοῦται πρὸς τὸ ἀληθὲς εἶναι>. . . ἀναγκαῖον δὲ ἔστιν ὅπερ ἀληθὲς ὃν οὐκ ἔστιν ἐπιδεκτικὸν τοῦ ψεύδους εἶναι ἢ ἐπιδεκτικὸν μὲν ἔστι, τὰ δ' ἐκτὸς αὐτῷ ἐναντιοῦται πρὸς τὸ ψεῦδος εἶναι . . . οὐκ ἀναγκαῖον δὲ ἔστιν ὃ καὶ <εἰ> ἀληθὲς ἔστιν καὶ ψεῦδος οἷόν τε εἶναι τῶν ἐκτὸς μηδὲν ἐναντιουμένων <εἰ τὸ ψεῦδος εἶναι>.

In the reconstruction of the sources which report Chrysippus' modal definitions I follow M. Frede 1974, 107–14; cf. Bobzien 1986, 40–9. The modal notions reported as Stoic in Diogenes Laertius and in Boethius are not directly attributed to Chrysippus, but there can be little doubt that they were his—cf. the Appendix 3.1.6 below for this attribution and for the emendation of the impossibility definition.

<sup>41</sup> Cf. above and Boeth. *Int.* II 234–5; Chrysippus leaves out the phrases 'according to the proposition's own nature' (*Natura propria enuntiationis*) and 'as far as itself is concerned' (*quantum in se est*). This could be merely an ellipsis, or else it may show that Philo's specific concept of consistency has been given up by Chrysippus?

knew the Philonian definitions I assume that these parts are intended to reproduce Philo's definitions. Again, we are given no clue regarding the meaning of 'being capable of having a truth-value', and although it may be relevant to the question of determinism, any interpretation would be merely conjectural.

The meaning of the *second parts* is at first sight even less clear. In order to understand them fully two questions have to be answered. The first is: what are the external things that hinder propositions from having a certain truth-value? It should be safe to assume that the external things hindering a proposition from being true (false) are precisely those external things which hinder it from being actualized (not being actualized). Furthermore, one may take it that 'external' (ἐκτός) is contrasted with something 'internal'.

Some examples for external hindrances would help us further; but none have been handed down. There is one passage (Alex. *An. pr.* 185), from which we can at least surmise that the relevant external factor or circumstance for the proposition 'this chaff burns' is the ocean surrounding the chaff (or that the ocean surrounds the chaff). Accordingly, I assume that the external hindrances would include such prosaic cases as the following: Dio's being tied to a chair, having his legs paralysed, being severely ill; they could all hinder Dio from walking and thus be relevant to the modality of the proposition 'Dio is walking'. The externality of the hindering things in the accounts thus seems best understood as their being physical influence factors which prevent the actualization of the proposition. It is not easy to conceive of external hindrances to falsehood; however, it seems plausible that that which externally hinders something from being false (from not being actualized) is that which externally forces it to be true (to be actualized)—as is suggested by a related passage, Plut. *Stoic. rep.* ch. 46, see 3.2 below. (Thus, perhaps the cold weather keeps, or helps keeping, the proposition 'the river is frozen' from being false.)

The second question about the meaning of Chrysippus' modal accounts is this: when—relative to *now*—are the truth and falsehood meant to be hindered or not to be hindered? We saw above that the time-relatedness of Diodorus' modal accounts (to present and future) can be understood as making explicit the time-relatedness of one common usage of modal expressions. When I say something is (*now*) possible, I may want to say that it 'could be' at some present or future time. This seems also to have been the philosophical idea underlying Chrysippus' formulation of his modal definitions. (This is not surprising, since not only did he discuss Diodorus' modal notions, he also took part in the same dispute over determinism as Diodorus or his followers.) For instance imagine that someone asks 'Is it possible for Dio to die of tuberculosis?' and the reply is: 'No, it is not possible; he has been vaccinated three months ago'. The answer implies that it is impossible for Dio to die of tuberculosis since

from now on the vaccination will prevent him from dying of that disease. Last year, though, it may still have been possible, because he had not yet been vaccinated.

The same interpretation of the time at which the hindrances are meant to be present can be reached via a different route if one pursues the following thought:

- ‘Dio is taking a walk (*περιπάτει*) today’ is presumably possible now if sometime (from *now* on) today he is or will be free to take a walk.
- ‘Diotima goes to Megara this year’ is possible *now* if sometime (from *now* on) this year she is not or will not be prevented from going to Megara.

The question is: when do hindrances have to be absent in order for propositions such as ‘Dio is taking a walk’ (i.e. propositions without a time index) to be possible *now*? The answer would naturally be:

- ‘Dio is taking a walk’ is possible *now* if there is a time from *now* on at which he is not prevented from walking; i.e. if either *now* or at some later time he is not hindered from walking.

Similarly for the presence of hindrances in the case of impossibility—where this seems even more obvious:

- ‘Dio is taking a walk today’ is *now* impossible if today at all times Dio is hindered from walking.
- ‘Diotima goes to Megara this year’ is *now* impossible if at all times (from *now* on) this year she will be prevented from going to Megara.
- ‘Dio is taking a walk’ is *now* impossible if from *now* on always Dio is hindered from taking a walk. (That is, now and later Dio is prevented from walking.)

The best argument in favour of this understanding of Chrysippus’ modalities is perhaps that we have documentary evidence for it: according to Alexander (*An. pr.* 177.25–178.4), for Chrysippus ‘Dio has died’ is possible (*now*) if it can be true at some time (*ποτε*) and ‘this one has died’ would not be impossible if, although being false *now*, it could be asserted sometime later (*ὑστερόν ποτε*), after this one’s death—for then, it is implied, it would be true.<sup>42</sup> We only have to read ‘can be true’ as a short version for ‘is capable of truth and not hindered from being true’. And this seems legitimate since the point at issue in the passage is not the modal accounts but the fact that ‘Dio is dead’ can be true sometime later, whereas ‘this one is dead’ cannot and hence only the first but not the second is Chrysippean possible. (In any event, this passage speaks against the understanding of the modal accounts in such a way that the

<sup>42</sup> Chrysippus’ reasoning is sound only if ‘this one has died’ is equivalent to ‘this one has died in this world cycle’; otherwise the Stoic theory of eternal recurrence would cause trouble.

effects of the hindering circumstances have to be present or absent at the time at which the proposition has the modality (e.g. that  $p$  is possible *now* if and only if it is capable of being true and not hindered by external things from being true *now*). So does also the fact that the generally accepted modal principle (P1), that what is necessary is always true, would not hold—whereas for Diodorus and for Chrysippus in the above reading of the definitions it does hold in the sense that what is necessary is true always from *now* on.)

Chrysippus' four modal accounts can then be paraphrased as follows:

A proposition is possible *now* if and only if it is internally capable of being at some time true and nothing external hinders it from being true at some time from *now* on.

A proposition is impossible *now* if and only if either it is not internally capable of ever being true or it is internally capable of being at some time true but it is externally hindered from being true at all times from *now* on.

A proposition is necessary *now* if and only if either it is not internally capable of ever being false or it is internally capable of being at some time false but it is externally hindered from being false at all times from *now* on.

A proposition is non-necessary *now* if and only if it is internally capable of being at some time false and nothing external hinders it from being false at some time from *now* on.<sup>43</sup>

Accordingly, a proposition is Chrysippean contingent precisely if it is Philonian contingent *and* from now on there is both a time when it is not hindered from being true and a time when it is not hindered from being

<sup>43</sup> Or, more formally, with  $H T_i[p]$  for 'external factors hinder that the proposition  $p$  is true-at- $t$ ': (I add no time index to the operator  $H$  itself—resulting in something like  $H_i T_i[p]$ —, since our sources say nothing about when the hindrances have to be present. In the 'normal case' one would expect them to be present (absent) when truth or falsehood are (are not) hindered. But I do not want to rule out the possibility that preceding circumstances might influence later truths, as this could be relevant for Stoic fate theory.)

(C/M)	$M_n[p]$	$=_{df}$	$CAP \exists_i T_i[p] \wedge \exists_i (t \geq n \wedge \neg H T_i[p])$
(C/ $\neg$ M)	$\neg M_n[p]$	$=_{df}$	$\neg CAP \forall_i T_i[p] \vee \forall_i (t \geq n \rightarrow H F_i[p])$
(C/L)	$L_n[p]$	$=_{df}$	$\neg CAP \forall_i F_i[p] \vee \forall_i (t \geq n \rightarrow H T_i[p])$
(C/ $\neg$ L)	$\neg L_n[p]$	$=_{df}$	$CAP \exists_i F_i[p] \wedge \exists_i (t \geq n \wedge \neg H F_i[p])$

Thus, while the truth-criterion for a proposition concerns the relative present ('*now*'), the modality-criteria for a propositions (without time-indexicals) are concerned with the relative present-plus-future. This is, however, not so in the case of propositions with time-indexicals. If a time-indexical ('tomorrow', 'at noon', 'this year') is added to a proposition, the criterion time of the modalities is restricted from present-plus-future to the (relative) time the time-indexical refers to. This holds for Diodorus and Chrysippus. Hence, in the case of propositions with time indexicals, the difference between truth-criterion time and modality-criterion time vanishes. For details see Bobzien 1993, 79–80, n. 36.

An alternative would perhaps be:

(C/M')	$M_n[p]$	$=_{df}$	$\exists_i (t \geq n \wedge (CAP T_i[p] \wedge \neg H T_i[p]))$
(C/ $\neg$ M')	$\neg M_n[p]$	$=_{df}$	$\forall_i (t \geq n \rightarrow (\neg CAP T_i[p] \vee H F_i[p]))$ etc.

false.<sup>44</sup> These times do not have to (but could, in principle) be the same.<sup>45</sup> In the case of the proposition 'it is day', they may never be the same. In the case of 'I am talking' there are many times at which there are no hindrances either way—namely whenever both nothing external keeps me from speaking and nothing external forces me to speak.

On this understanding of the Chrysippean modal definitions, it becomes very likely that Chrysippus developed his notions simply by way of slightly modifying Diodorus' concept of possibility. Diodorus' requirement for the possibility of 'Dio is walking' is that Dio walks *now* or later. Chrysippus' requirement is that nothing hinders Dio from walking now or later. Where for Diodorus it matters whether Dio walks at some time from *now* on (possibility) or never from *now* on (impossibility), for Chrysippus it matters whether Dio is not tied to his chair at some time from *now* on (possibility) or whether he is tied to his chair from *now* to his death (alas!) (impossibility). In general, the only significant formal difference between Diodorean and Chrysippean modal accounts is that where Diodorus demands that the proposition be either true or false, for Chrysippus the absence or presence of hindrances to its truth or falsehood is required.<sup>46</sup>

### 3.1.5 Contingency and freedom

With this slight modification Chrysippus overcame the unwelcome necessitarian consequences of Diodorus' modalities: counterfactual possibilities (and factual non-necessities) are catered for. There are propositions (about what does or does not happen) which are never, or never again, true but which are still possible—viz. as long as there is some future time at which

<sup>44</sup> Or more formally:

$$(C/C) \quad C_n[p] =_{df} ((CAP \exists_i T_i[p]) \wedge (CAP \exists_i F_i[p])) \wedge ((\exists_i (t \geq n \wedge \neg H T_i[p])) \wedge (\exists_i (t \geq n \wedge \neg H F_i[p])))$$

<sup>45</sup> Note that the account of Chrysippean contingency is not

$$((CAP \exists_i T_i[p]) \wedge (CAP \exists_i F_i[p])) \wedge \exists_i (t \geq n \wedge (\neg H T_i[p] \wedge \neg H F_i[p])).$$

This case is clearly crucial for the preservation of counterfactual possibilities; but it is not a necessary condition for contingency (see below).

<sup>46</sup> Why did Chrysippus add Philo's account as a first criterion in his definitions? Diodorus did not do this. The answer must be that there are propositions which are prevented neither from being false nor from being true by any external circumstances and which Chrysippus still did not want to be contingent. Take the proposition 'This circle is square'. There are future times at which it is not externally hindered from being true and others at which it is not externally hindered from being false. Still, this does not give the circle any real chance of ever being square. There is something intrinsically wrong with the proposition which throws it out of the game before the hindrance-criterion can be applied. Chrysippus could not want propositions of this type to be contingent. The addition of the Philonian criterion guarantees that they come out as impossible. Note that there was no such need for this—Philonian—clause in the case of Diodorus. (For a more detailed comparison of the three modal systems see Bobzien 1993.)

they are not hindered from being true. Take for instance the proposition 'Thea will go to Megara' and assume that she never will. According to Diodorus, this proposition is impossible, as it is and will be false. For Chrysippus, it is possible and hence contingent, if we assume such things as that Thea has access to the basic means necessary for such a journey, etc. For even though she never actually sets off to Megara, there are times at which she is not externally hindered from doing so. The crucial case of contingency which was logically precluded in Diodorus' theory, namely that the conditions for non-necessity and possibility are met *at the same time* (see 3.1.2) is thus not ruled out by Chrysippus' position. Nothing is logically wrong with the assumption that at the same time a proposition is prevented neither from being true nor from being false.

We have seen above that the Hellenistic logicians did not use propositions with a real date, but worked with a temporalized concept of truth (3.1.1), and that this fact was reflected in the way Diodorus' modal notions were criticized as having necessitarian consequences. They do not exclude contingency *per se*, but a particular kind of contingency which is essential for the question of determinism (3.1.2). Now note that Chrysippus naturally faced the same problem: he likewise had to, and—according to our sources did—introduce the conditions for the crucial case of contingency without resort to propositions with a real date and an atemporal concept of truth. The way Chrysippus proceeded was to select two subclasses of the relevant contingent propositions by employing the criterion that a proposition has to be either (a) never true (or subsisting) and still possible, or (b) always true (or subsisting) and still non-necessary.<sup>47</sup> In terms of Chrysippus' modal notions such crucial cases of contingent propositions could be singled out as follows:

- (a) they are (i) *never true*, hence always false, hence never hindered from being false, and (ii) *possible*, i.e. at some (present or future) time not hindered from being true; hence there is some (present or future) time at which the proposition is neither hindered from being false nor from being true.
- (b) they are (i) *always true*, hence never hindered from being true, and (ii) *non-necessary*, i.e. at some (present or future) time not hindered from being false; hence at some (present or future) time they are neither hindered from being false nor from being true.

The first case picks out counterfactual possibilities, the second factual non-necessities; these are the two crucial cases which were precluded by Diodorus' modal system. They are the cases germane to the preservation

<sup>47</sup> See e.g. Cic. *Fat.* 13 'et quae non sint futura, posse fieri dicis (i.e. Chrysippus), ut frangi hanc gemmam, etiamsi id *numquam* futurum sit'; Cf. Plut. *Stoic. rep.* 1055e *κἂν μὴ μέλλῃ γενέσθαι*, which must also refer to the whole relevant period of time in the future.

of purposeful action, things being in our power, and moral responsibility (see below).<sup>48</sup>

These two cases make up only a subclass of Chrysippean contingent propositions. This makes it clear that one is not justified in concluding that Chrysippus ends up with a concept of contingency according to which everything that is contingent is in our power, or depends on us, or is even undetermined. In fact, this assumption goes counter to Chrysippus' own examples, above all to the proposition 'it is night', which according to Chrysippus' own statement is (at daytime) both possible and false (Alex. *An. pr.* 177.25 ff.), hence contingent. However, it does not ever depend on us whether it is night.<sup>49</sup> Generally, at least in all cases in which the condition for contingency is satisfied, but not for possibility and non-necessity at the same time, we will have contingent propositions which cannot help to preserve that which depends on us.

Equally, there is no reason for assuming that Chrysippus' modal concepts guarantee human freedom by way of rendering all propositions about the future contingent.<sup>50</sup> This seems a case of throwing out the baby with the bath water: the necessity of true propositions about the future would then be ruled out *a priori*. But Chrysippus may want to be able to say something about some necessary future events. Apart from such obvious and less interesting cases as 'Next week Wednesday will be the day after Tuesday' as future necessity and 'Socrates will be alive' as future impossibility, there are cases like: 'Dio will be dead (i.e. soon)', taking it that Dio has been wounded in the heart. In such a case death was then seen as inevitable in Hellenistic times, probably also by the Stoics (cf. *SE M* 8.254–5 Quint. *Inst. orat.* 5.9.5 and below 4.2.2), and Chrysippus' modal notions should cover such cases. A similar case for impossibility would be 'Dio will walk', supposing that Dio has recently been permanently paralysed in his legs. On the above understanding, Chrysippus' modal notions do account for such cases: at all times up to his death the wound in Dio's heart prevents the proposition 'Dio will be dead (i.e. soon)' from being false by keeping Dio from being alive much longer. (After that, Dio's being dead will presumably keep it from being false.) And accordingly for the case of future impossibility.

<sup>48</sup> Note that these are not the only cases in which this necessary condition for something's depending on us is satisfied. There is a third such class, namely of those contingent propositions which from *now* on are neither always true nor always false, but for which there are times at which they are not hindered either way. They pick out either counterfactual possibilities or factual non-necessities. But it is harder to describe this third class in terms of Stoic logic.

<sup>49</sup> The following examples of Chrysippean contingent propositions also do not necessarily express something that is in the power of a human being: 'Diocles is alive' (DL 7.75), 'Dio is dead' (Alex. *An. pr.* 177), 'He dies (or will die) on land' (Plut. *Stoic. rep.* 1055f), 'He will die at sea' (Boeth. *Int.* II 235), the same with 'Fabius' as subject in Cic. *Fat.* 12 and 14.

<sup>50</sup> This is assumed for instance by Reesor (1978), Rist (1969).

Chrysippus hence succeeded in overcoming the flaws of Diodorus' modal system. His does not preclude counterfactual possibilities and factual non-necessities. But neither did Philo's (3.1.3). So what, if any, is the positive contribution of Chrysippus' innovation for the question of determinism and freedom? His addition to Philo's modal notions is the criterion of the absence or presence of external hindrances. In this way he introduces a factor of (static or dynamic) physical force, and makes the physical circumstances in the world a relevant factor for the modalities. Thus Chrysippus' modalities become a 'mixture' of essentialist or conceptual<sup>51</sup> and physical modalities, that are relevant for the question of determinism. The absence of external force and hindrance at some present or future time forms part of the criterion for possibility and non-necessity. Both concepts are thus characterized by a certain concept of freedom that is based on external factors: the freedom from external hindrances and—presumably—external force, respectively. Contingency generally requires freedom both from external hindrances and external force. And Chrysippus' characterization of the special kinds of contingency concerned with counterfactual possibilities and factual non-necessities implies the requirement of the absence of both hindrance and force at the same time (and indeed he assumes that there are such cases (Cic. *Fat.* 13)). Thus he provides space in the world—or in his ontology—for changes and qualitative states that are both free from external hindrances and free from external force. These should include those occurrences in which the object that changes or is in a particular state is free from external hindrance and force in this sense. Such 'two-sided freedom (from)', as I call it, is an important condition for purposeful action (Ch. 5) and for changes that depend on us and the attribution of moral responsibility for them (Ch. 6) in Chrysippus' compatibilism. (Chrysippus has no one word for this two-sided freedom from external influences. It is always described in terms of the absence of hindrance.)

### 3.1.6\* Appendix: Identification of Chrysippus' modal notions

The claim that the Stoic modal theory which has been presented in 3.1 is that of Chrysippus has so far simply been assumed without argument. The problem is that the two main sources, Boethius and Diogenes Laertius, although they report expressly *Stoic* modal definitions, do not mention any particular Stoic. Alexander, in *Fat.* ch. 10, provides no attribution at all, although he, too, seems to deal with Stoic modalities (see 3.3). Epictetus, *Diss.* 2.19, Alexander, *An. pr.* 177, and Cicero, *Fat.* 13 on the other hand report from Chrysippus' modal theory; however, they do not

<sup>51</sup> Depending on one's understanding of the first parts of the accounts, see above, n. 29.



report his modal definitions, but some related modal principles.<sup>52</sup> In favour of Chrysippus' authorship of the modal accounts in Diogenes and Boethius it can first be adduced that we know that Chrysippus *had* a system of modal notions and wrote a number of books on possibility (Epict. *Diss.* 2.19, Plut. *Stoic. rep.* 1054c; cf. Cic. *Fat.* 1 and 13–15). (For comparison, the notions of the conditional, handed down in a similar way for Philo, Diodorus, and 'others', not even called Stoics, in fact give Chrysippus' notion as number three (see M. Frede 1974, 81–3)). In addition to these inferential reasons, Plutarch, *Stoic. rep.* ch. 46, provides some direct evidence. It is the only source which not only reports parts of Chrysippus' modal definitions, but also attributes them to him. This passage is therefore important. It is possible to show that Plutarch uses Chrysippus' modal definitions in several places in this passage, and that the modal accounts in Diogenes (and hence the ones in Boethius) must be those introduced by Chrysippus. Plutarch does not cite the definitions as such but alludes to them in various ways in his argumentation. One has to extract the bits and pieces from the text. (For a translation and philosophical analysis of this passage see below 3.2).

(1) 'Ο δὲ τῶν δυνατῶν λόγος πρὸς τὸν τῆς εἰμαρμένης λόγον αὐτῷ πῶς οὐ μαχόμενός ἐστιν; (2) (α) εἰ γὰρ οὐκ ἔστι δυνατόν ὅπερ ἡ ἐστὶν ἀληθὲς ἢ ἔσται κατὰ Διόδωρον, ἀλλὰ πᾶν τὸ ἐπιδεκτικὸν τοῦ γενέσθαι, καὶ μὴ μέλλῃ γενήσεσθαι, δυνατόν ἐστιν, (β) ἔσται δυνατόν πολλὰ τῶν μὴ καθ' εἰμαρμένην (3) <Ὡστ' ἢ (α) τὴν><sup>53</sup> ἀνίκητον καὶ ἀνεκβίαστον καὶ περιγενητικὴν ἀπάντων ἢ εἰμαρμένη δύναμιν ἀπόλλυσιν, ἢ (β) ταύτης οἷαν ἀξιοῖ Χρῦσιππος οὕσης τὸ ἐπιδεκτικὸν τοῦ γενέσθαι πολλάκις εἰς τὸ ἀδύνατον ἐμπεσείται. (4) καὶ (α) πᾶν μὲν ἀληθὲς ἀναγκαῖον ἔσται τῇ κυριωτάτῃ πασῶν ἀνάγκῃ κατελιγμένον, (β) πᾶν δὲ ψεῦδος ἀδύνατον, τὴν μεγίστην ἔχον αἰτίαν ἀντιπίπτουσιν αὐτῷ πρὸς τὸ ἀληθὲς γενέσθαι. (5) (α) ᾧ γὰρ ἐν θαλάττῃ πεπρωμένον ἐστὶν ἀποθανεῖν, πῶς ἂν οἷόν τε τοῦτον ἐπιδεκτικὸν εἶναι τοῦ ἐν γῇ ἀποθανεῖν; (β) τί δὲ τὸν Μεγαροῖ δυνατόν ἐστιν ἔλθειν εἰς Ἀθήνας ὑπὸ τῆς εἰμαρμένης κωλυόμενον;

First, sentence (4b) presents an application of the second disjunct of the impossibility definition in Diogenes as it has to be supplemented if the modal notions are to be interdefinable. A proposition (something that can have a truth-value) is said to be impossible (*ἀδύνατον*) because of something *ἀντιπίπτουσιν αὐτῷ πρὸς τὸ ἀληθὲς γενέσθαι*. Compare this with *αὐτῷ ἐναντιοῦται πρὸς τὸ ψεῦδος εἶναι* from the necessity definition in Diogenes.<sup>54</sup> Such a close correspondence in wording does not occur

<sup>52</sup> Cf. Bobzien 1986, 51–4. This has often been overlooked, for instance by Mates 1961, 40–1; Sambursky 1959, 76; Rist 1969, 119; Sorabji 1980a, 270.

<sup>53</sup> Some emendation is needed. Von Arnim's <ἢ ἄρα τὴν> would do as well.

<sup>54</sup> This correlation is perhaps the best evidence against Mignucci's suggestion that Chrysippus' modal definitions were not interdefinable (Mignucci 1978), which has also been adopted by Vuillemin 1983, and 1984, ch. 5, and, more recently by Algra 1995, 289 n. 75. On this point see also Bobzien 1986, 113–18.

in any other source about Stoic modalities.<sup>55</sup> The illustration of (4b) in (5b), again, employs the factor of something preventing something from happening as a criterion of impossibility (cf. also below 3.2). This time *κωλυόμενον* is used for 'preventing'; this is the expression we find in most other Greek sources which report—assumedly—Stoic modal notions, although Diogenes has *ἐναντιουμένων*.

Second, the key term of the first parts of the modal definitions in Diogenes, *ἐπιδεκτικόν*, occurs three times as a modal criterion (in (2a), (3b), (5a)). It, too, does not occur anywhere else in modal definitions, if one leaves aside the Latin translation in Boethius. However, if one assumes that the expression has the same meaning as in the definitions in Diogenes, all three passages in Plutarch prove unsatisfactory in that they do not square with Diogenes' definitions:

The last two passages (3b), (5a) are intended to show up a contradiction in Chrysippus' modal theory, whereas—with the reading of *ἐπιδεκτικόν* in Diogenes' sense—in each case they state something perfectly consistent: for, there are, according to Diogenes' version, impossible things that are capable (*ἐπιδεκτικόν*) of being true, namely those which are, in addition, externally hindered from being true.

The purpose of the first passage (2a) is to point out the difference between Diodorus' and Chrysippus' concepts of possibility (as far as it is relevant for determinism). As we know from Cicero, this consists in the fact that for Chrysippus, but not for Diodorus, there are false possible future propositions. In this context, *πάν τὸ ἐπιδεκτικὸν τοῦ γενέσθαι, καὶ μὴ μέλλῃ γενήσεσθαι, δυνατόν ἐστιν* is meant to describe, somehow, Chrysippus' concept of possibility. However, again the statement is in conflict with what we know from Diogenes if we assume *ἐπιδεκτικόν* to mean the same in Plutarch: there not everything that is *ἐπιδεκτικόν* to happen and does not happen is possible (as Plutarch's sentence implies), but only that which is, in addition, not hindered from happening. This reading of the Plutarch passage has led some scholars to suspect that Chrysippus' definition was rather like Philo's and perhaps different from that in Diogenes.<sup>56</sup> However, this cannot be so, since (as we have seen), the element of hindrance does come in where Plutarch reports parts of the definition of impossibility.<sup>57</sup>

<sup>55</sup> Why does Plutarch only use the second disjunct? Possibly because the propositions which are covered by his argument are all capable of being true and of being false, and would thus fall under the second disjuncts of the impossibility and necessity definitions.

<sup>56</sup> e.g. Mates 1961, 40–1, Sambursky 1959, 102.

<sup>57</sup> If one presupposes that Chrysippus' modal notions fulfilled the requirement of interdefinability and starts out with the bit on the impossible in Plutarch, one has to supplement the definition of the possible with a condition of non-hindrance as we have it in Diogenes.

The problem disappears instantaneously in all three sentences, when one makes the following assumption: Just like some modern scholars—being unaware of the interdefinability of the modal notions—Plutarch misunderstood the possibility definiens τὸ ἐπιδεκτικὸν τοῦ ἀληθὲς εἶναι τῶν ἐκτὸς μὴ ἐναντιουμένων εἰ τὸ ἀληθὲς εἶναι, taking the genitive absolute as causal instead of introducing a second condition, meaning ‘that which is capable of being true *since* it is not hindered . . .’. He then used ἐπιδεκτικὸν as an abbreviation for the whole definiens. If one substitutes for ἐπιδεκτικὸν each time the whole definiens, the entire passage immediately makes perfect sense.<sup>58</sup>

To sum up, the close correlation in terminology and wording between the bits of the Chrysippean modal accounts in Plutarch and the definitions in Diogenes cannot be explained by chance, and no other source on Stoic modal definitions shows a comparable correspondence. We have thus every reason to believe that the modal notions in Diogenes are in fact those introduced by Chrysippus and that Diogenes preserves—by and large—Chrysippus’ formulation of the definitions.

### 3.2 OBJECTION: STOIC DETERMINISM AND STOIC MODAL LOGIC ARE INCOMPATIBLE

We have seen that we have very good reasons to believe that Chrysippus thought to have provided the correct analysis of the four modalities, and that according to this analysis counterfactual possibilities were preserved, and thus an adequate modal basis was secured for purposeful action and the attribution of responsibility. We have no direct evidence that Chrysippus linked his modal theory to his doctrine of fate. But we know that he denied that everything that is fated is also necessary.<sup>59</sup> From this I believe we can infer that he thought that, at least according to his own modal notions, not everything fated comes out as necessary, although his point presumably was intended in the broader sense, that according to any reasonable concept of necessity not everything that is fated is also necessary.<sup>60</sup>

However, opponents of the Stoics were not convinced by this claim. They soon expressly drew the connection between Chrysippus’ modal

<sup>58</sup> As to the clause καὶ μὴ μέλλῃ γενήσεσθαι in (2a), a phrase which is introduced by ‘even if not . . .’ can only have an explanatory, not a defining function. It is not part of the definition of the possible, but serves to manifest the difference from Diodorus, and to single out the class of possible things which is of primary importance in Plutarch’s argument (i.e. the class of counterfactual possibilities).

<sup>59</sup> Cic. *Fat.* 39, 41, cf also Alex. *Fat.* ch. 10, Augustine, *Civ.* V 10.

<sup>60</sup> Compare on this point also below, 6.3.7.

logic and Stoic physical determinism. More precisely, they tried to show that given Chrysippus' account of fate, and also his modal analysis, there will *in fact* be nothing that is contingent in the required way. The set of modal notions that matches Stoic physics, the suggestion is, are rather Diodorus'. Only modal notions that are interlocked with logical necessitarianism are seen as apt to express Stoic physical determinism. The problems the opponents air in various interrelated ways, are: how can anything that is governed by the Stoic immutable fate none the less be not necessary, and how can anything that is not fated to happen, and hence does not happen, still be, in a genuine sense, called 'possible'? For is not according to Chrysippus himself everything fated in such a way that nothing can—in some sense of 'can'—come about different than it does?<sup>61</sup> How does it make sense to talk about alternative possibilities, or to say that it is possible for something to happen, if it is fated that something else takes place which precludes its happening?

This sort of deliberation was clothed in various arguments and became one of the standard attacks against Stoic fate theory. An alleged conflict between fate or physical necessity and Stoic possibility is for instance reported in Alexander's *On Fate* (*Fat.* 177.27–178.7) and in the group of arguments in the *Quaestio* I 4, further in Boethius' *On Aristotle's De Interpretatione* (*Int.* II 235.4–26).<sup>62</sup> The earliest known version, and the only one which connects this conflict with Chrysippus, is found in Plutarch's *On Stoic Self-contradictions* (*Stoic. rep.* 1055d–f). Hence I focus on Plutarch's argument as a representative of this tradition, and analyse it in some detail. The other versions are consulted where they help to elucidate Plutarch's reasoning, and, since there are some philosophically relevant differences, they are also given some space in their own right, as far as they are germane to our understanding of the relevant Stoic theories. But first Plutarch's argument:

- (1) How does his (i.e. Chrysippus') theory of the possible not conflict with his theory of fate?<sup>63</sup>

<sup>61</sup> See above, 1.2.

<sup>62</sup> The arguments in Alex. *Quaest.* I 4.1–3 seem to be levelled against Stoic tenets, but these may have been discussed also among the Peripatetics themselves. (*Quaest.* I 4.4 seems directed against some unorthodox Peripatetic suggestions.) The terminology in which the Stoic view is presented and criticized overlaps with that of Alexander's *On Fate*. It is typical second-century terminology and not early Stoic. The arguments in the whole passage use a very limited number of expressions and formulaic phrases. Some are straightforward fallacies. For discussions of these arguments see Sharples (1982b) and Mignucci (1981). A related argument can be found in Cic. *Fat.* 11–17, for which see Ch. 4 below.

<sup>63</sup> Plutarch does not name any book titles. We know from Epictetus that Chrysippus wrote about the notion of the possible in one of his books *On the possible* (Plutarch quotes from the last of these books in *Stoic. rep.* 1054c–d), and from Cic. *Fat.* 1 and 13 we can infer that the debate about future contingents between Diodorus and Chrysippus belonged

(2) For, (a) if possible is not—as according to Diodorus—what either is true or will be <true>, but if everything which is capable of happening is possible, even if it will not happen in the future, (b) then many of the things which are not in accordance with fate will be possible.

(3) Hence either (a) fate loses its invincible, unconquerable, supreme power, or (b)—fate being what Chrysippus holds—often what is capable of happening will fall under the impossible;

(4) that is, (a) everything true will be necessary, compelled by the most sovereign necessity of all, and (b) everything false will be impossible, the greatest cause keeping it from becoming true.

(5) For (a) how can someone who is destined to die at sea be capable of dying on land? and (b) how is it possible for the one in Megara to go to Athens, when he is prevented by fate?<sup>64</sup> (*Stoic. rep.* 1055d–f)

At first sight the Plutarch passage appears to be of little value: apart from Diodorus' notion of the possible and the fact that Chrysippus thought fate to be indomitable—both testified sufficiently by other sources—it seems only to report an account of Chrysippus' notion of possibility which appears to be at odds with other sources. The rest looks like the usual polemic we are more than familiar with from Plutarch. However, closer scrutiny betrays that Plutarch had intimate knowledge of both Chrysippus' fate theory and his modal accounts.<sup>65</sup> This comes out in many places where Plutarch alludes to Chrysippean doctrine and employs bits and phrases in it for his own polemical purposes. Now as then, full understanding and appreciation of Plutarch's sophisticated polemics can be gained only by those who are familiar with the theories he targeted. For us, the allusions render the passage useful in a number of respects: for our understanding of the relation between Diodorus' and Chrysippus' modal theory; for the identification of the Chrysippean set of modal notions;<sup>66</sup> and in particular for our present concern, the history of a tradition of arguments which set fate against the contingent. The passage itself reads like a model 'self-contradiction'. Its structure, in outline, is as follows: Plutarch's thesis is that

to the topic 'on the possible', which was part of logic. The frequent use of truth-value terminology, instead of event terminology, suggests that in *Stoic. rep.* 1055d–f Plutarch, or his source, drew from a Chrysippean work on modal logic. It is likely that Plutarch's source supplied all four Chrysippean modal definitions (and probably the Diodorean ones as well). In any event, the parallel passage in Boeth. *Int.* II 234–5 (or rather Boethius' source), which uses the *same* two examples, is copied from such a text.

<sup>64</sup> For the Greek text see above, Appendix 3.1.6.

<sup>65</sup> This comes as no surprise: we know from the Lamprias catalogue that Plutarch himself composed books on fate (Lamprias 58) and on that which depends on us (Lamprias 154); the latter was written against the Stoics (*ibid.*).

<sup>66</sup> See Appendix 3.1.6 above. The strong similarity of this passage with Boeth. *Int.* II 234–5 also allows us to infer that the latter reports from a fairly early anti-Stoic source.

(T) Chrysippus' theory of fate contradicts his theory of what is possible (1).

The argument that follows has three steps, of which one is implicit only:

- (P1) From Chrysippus' theory of the possible it seems to follow that there are things that are both possible and not fated. (2)
- (P2) If there are things that are both possible and not fated then fate is not what Chrysippus says it is. (This is the implicit step.)
- (C) Hence, either Chrysippus can keep his theory of what is possible, but fate is not what he says it is (3a); or Chrysippus' account of fate holds, but certain things he deems possible are in fact impossible (3b). (Sentences (4) and (5) serve to explicate (3b).)

The philosophically relevant points of this argument become clearer through a more detailed analysis. As to the thesis (T), we can extract the conflicting elements of the self-contradiction from the argument: On the side of the theory of the possible, we learn from (2b) that the conflicting property is that there are possible propositions which are about things that will never happen; or, in other words, that there are possible propositions that are always false.<sup>67</sup> This was one of the main differences between Chrysippus and Diodorus (3.1.2 and 3.1.4).

From (3a) it is plain that the property of fate which leads to a conflict with possibility is that it is an invincible, unconquerable, supreme power. Plutarch does not maintain that the *Fate Principle* is in conflict with Chrysippus' theory of possibility.<sup>68</sup> Since he is first and foremost concerned with those Chrysippean possible propositions which will never be true, and which would be Diodorean impossible, Plutarch's criticism does not deal directly with that which happens, and hence not with the statement that everything that happens does so in accordance with fate. All Plutarch claims is that Chrysippus' conception of counterfactual possibilities is incompatible with a concept of fate according to which fate is an invincible power. It is not the extension of fate that is under dispute, but its 'intensity'.

One should assume that Chrysippus would have wholeheartedly agreed with the first conditional of the argument, in (P1), that his theory of possibility implies that there are things that are possible but not fated. For it was part of this theory that there are counterfactual possibilities, and since

<sup>67</sup> The restriction to the future can be explained by the fact that the debate between Diodorus and Chrysippus about the possible concerned future contingents, cf. Cic. *Fat.* 1, 13; Boeth. *Int.* II 325. Although μέλλειν plus infinitive is occasionally distinguished from the simple future tense in similar philosophical contexts (cf. Arist. *Gen. et cor.* 337<sup>b</sup>3–7), this seems not to be relevant here.

<sup>68</sup> One reason for this may be that Plutarch himself accepted some version of the Fate Principle. For this was, it seems, standard Platonist doctrine at his time.

what does not happen is not fated (to happen), the existence of 'unfated' possibilities follows. The implicit step (P2) from the possibility of something that is not fated to the statement that fate thus loses its invincible power is more problematic. It makes sense only if we take Plutarch to understand Chrysippus' concept of fate somehow in terms of modalities. And indeed—as the rest of the argument confirms—he assumes that fate makes that which is fated necessary, and everything else impossible.

The conclusion (C) states the dilemma Plutarch believes Chrysippus to be stuck with: Its first horn (3a), that Chrysippus, if he retains his theory of possibility, has to give up his account of fate *qua* invincible power, is not discussed any further. (No doubt this is the horn Plutarch would prefer.) The second horn of the dilemma (3b) can be paraphrased as 'If fate has invincible power, then many things that Chrysippus deems possible<sup>69</sup> will in fact turn out impossible'. From (2) we can infer that those Chrysippean possible things that turn out impossible are precisely those things which are not fated; or, on the level of propositions, those propositions which are (always) false and correspond to something that is not fated. This horn of the dilemma is far from clear; but the last sentences of the passage, (4) and (5), help to elucidate it.<sup>70</sup> There we learn that Plutarch maintains that Chrysippus' fate theory entails that there are *as a matter of fact* only two and not four modalities, necessity and impossibility, which together encompass everything that is true or false. He adds two points of explanation, one for either modality, each illustrated by an example.

If fate is how Chrysippus defines it, then, Plutarch claims, 'everything true will be necessary, compelled by the most sovereign necessity of all' (4a). We know from elsewhere that Chrysippus called fate 'necessity' and by 'the most sovereign necessity' Plutarch no doubt refers to Chrysippus' fate.<sup>71</sup> Plutarch's explanation can then be understood in two ways:

First, he could be simply playing on the ambiguity in the term 'necessity': since Chrysippus himself calls fate 'necessity', that which is fated (or the corresponding propositions) must be necessitated, hence necessary, and so their 'opposites' cannot be possible. This argumentation would be fallacious, since for Chrysippus 'necessity' and 'that which is necessary' are not the same (cf. 3.2.4 below)—although this did not prevent this objection from being made repeatedly in antiquity.

But perhaps Plutarch's strategy is more subtle and he intends to show that, if Chrysippus upholds his account of fate, every true proposition turns out necessary according to *Chrysippus' own* concept of necessity. (These are his tactics in the case of impossibility in (4b), see below.) The

<sup>69</sup> 'Capable of' (ἐπιδεκτικόν) refers to Chrysippus' concept of possibility, see Appendix 3.1.6.

<sup>70</sup> I understand the καί at the beginning of (4) as exegetical.

<sup>71</sup> See e.g. Plut. *Stoic. rep.* 1056c. Cf. also 1.4.2 and 3.4.2.

second disjunct of Chrysippus' necessity definition runs: that which, being capable of being false, is prevented from being false by external circumstances (3.1.4). Now, it seems that something is prevented from being false if it is in some way forced to be true. And this is what the choice of the verb 'to compel' (*καταλαμβάνειν*) may have been meant to express, for the text (4a) implies that fate compels everything true *to be true*.<sup>72</sup> Fate, *qua* Necessity, compels whatever happens to happen, hence compels the corresponding propositions to be true, thus preventing them from being false. In this way, contrary to what Chrysippus thinks, every proposition that Chrysippus considered to be true but non-necessary falls in fact under the second disjunct of his necessity definition. (All the remaining true propositions are necessary anyway.)

The example that is meant to illustrate this point is put in the form of a rhetorical question:

(5a) For how can someone who is destined to die at sea be capable<sup>73</sup> of dying on land?

insinuating that Chrysippus has to admit that someone who is destined to die at sea is *not* capable of dying on land, despite his claiming the opposite, presumably because fate necessitates and thus compels him to die at sea. The extra significance this example had for the Stoics becomes clear when one takes into account that we have a passage in Boethius telling us that Diodorus held (or that the Stoics stated that Diodorus, *unlike them*, held) exactly this, that if someone died at sea he could not have died on land (Boeth. *Int.* II 235.4–11). That is, Plutarch here hints at a point he had anticipated in (2), namely that, since Chrysippus' fate theory leaves him *de facto* with just two modalities (for occurrables), he ends up no better than Diodorus.

In the second part of his explanation Plutarch plays on Chrysippus' definition of the impossible (the second disjunct of which is 'that which is capable of being true but prevented by external circumstances from being true'):

(4b) Everything false will be impossible, the greatest cause keeping it from becoming true.

The greatest cause is another of Chrysippus' names for fate or the active power in the universe.<sup>74</sup> Plutarch's statement then comes to: all false

<sup>72</sup> If we can trust Diogenianus, *καταλαμβάνειν* was used by Chrysippus to express the relation between fate and events: *πάνθ' ὑπὸ τῆς ἀνάγκης καὶ τῆς εἰμαρμένης κατελήφθαι* (Eus. *Praep. ev.* 6.8.1 cf. 6.8.11); in that case, Plutarch's use of the phrase *ἀνάγκη καταλαμβάνει* is certainly no coincidence, and the double entendre concerns the whole phrase *ἀνάγκη καταλαμβάνει*.

<sup>73</sup> Another reference to Chrysippus' definition of possibility, see Appendix 3.1.6.

<sup>74</sup> Cf. Plut. *Stoic. rep.* 1056c; see also Stob. *Ecl.* I 79.5–10 and DL 7.149 and above 1.4.2.



propositions are prevented by fate from becoming true. A second rhetorical question illustrates this point:

(5b) . . . how is it possible for the one in Megara to go to Athens, when he is prevented by fate?<sup>75</sup>

We are not told in which way exactly 'the mightiest cause' prevents truth. A plausible guess may be this: Fate is the cause of the things that happen. By causing them (in which way is left unspecified) fate necessitates them and is thus the reason for their being necessary (4a). But by actively bringing about one thing, fate prevents anything else from happening instead, or prevents what happens from happening in any other way. For instance, fate prevents the one in Megara from going to Athens by causing him to go to Corinth.

This is only a conjecture of how Plutarch envisaged fate, *qua* cause, to prevent truth. But we find the idea I have just sketched in the first of the arguments in Alexander's *Quaestio* I 4, which seems to draw from the same tradition of anti-Stoic arguments as Plutarch. This argument is the closest parallel we have to Plutarch. It is presented in a rather convoluted way, in part due to the dialogue form of the *Quaestio*. The terminology used and the talk of modalities of events rather than propositions suggests that the position under attack is later than Chrysippus'. But this does not mean that it was essentially very different. The goal of the argument is to show that the Fate Principle destroys 'two-sided' possibility (that which is possible and whose contradictory is possible too) and contingency. The argument starts out from the Stoic beliefs that fate is a sequence of causes (*εἰρηδὸς αἰτίων*, *Quaest.* 8.31) and that that which is possible is that which can happen and is unprevented (*Quaest.* 9.6–7). It then tries to prove in a first step that on the assumption of the Fate Principle only that which happens is possible (*Quaest.* 8.31–9.16); in a second step that only that which happens of necessity is possible (*Quaest.* 9.18–31). The parallels to Plutarch are found mainly in the first step. In order to reach the first conclusion explicit use is made of the Stoics' own account of possibility. The conclusion that possibility is restricted to that which happens is explained by saying that fate prevents what happens from happening in any other way (*Quaest.* 9.1–3). And how fate can prevent things from occurring is explained like this:

. . . it is not possible for any of the things that happen in accordance with a sequence of causes, and in accordance with causes laid down beforehand, to happen otherwise. And if this were established it would follow that according to those who <maintain> that all things happen in accordance with fate, only

<sup>75</sup> The expression 'prevented' is another allusion to the second disjunct of the impossibility definition. The example should stem from Chrysippus. It also occurs in Boethius.

as many things as happen are possible; for <according to them,> everything that does not happen, does not happen on account of its having been prevented from happening by the causes, laid down beforehand, of the things that do happen.<sup>76</sup> (*Quaest.* 9.11–16, trans. Sharples, modified)

Thus similarly Plutarch may have attempted to show that according to Chrysippus' own modal definitions all propositions about things that do not happen are impossible since fate hinders them from being true by causing something that is incompatible with them. There would hence be no counterfactual possibilities.

Is Plutarch's criticism justified? Formally his way of proceeding seems legitimate. However, Chrysippus would surely retort that his argument is unsuccessful because Plutarch's understanding of the 'preventing circumstances' and of the Stoic concept of fate is inadequate. First, Plutarch simply ignores or suppresses the fact that the preventing circumstances from the modal definition have to be external. If I 'prevent' myself from going to Athens by deciding to stay at home instead, nothing external prevents me from going to Athens (assuming I have the means to go, etc.). The external causal factors involved are not *decisive* of whether or not I go. Second, although it will be in accordance with fate that I stay at home, and my staying at home is caused by fate in *some* way, this does not mean that fate forced me to stay—externally or otherwise. For fate works through me, and neither the internal nor the external causal factors involved can be said to be forcing or compelling me.<sup>77</sup> So fate, as understood by Chrysippus, certainly does not externally prevent from happening everything that does not happen, and Plutarch's argument can be deemed a failure.

Even so, is there not something in the thought that if everything is fated, nothing is contingent? Chrysippus himself explained the workings of the one active power as 'no particular thing, not even the smallest, can have happened otherwise than in accordance with the common nature and its reason' (Plut. *Stoic. rep.* 1050a, cf. 1.2). Obviously 'can' (in Greek *ἔστιν* plus infinitive) here is a modal expression of some sort, and is not this 'can' the one that is relevant for genuine contingency, whatever Chrysippus' modal definitions may be? This would be adopting a different strategy than Plutarch did. The idea is that there are objective criteria for genuine contingency, and that in a world like the Stoic one, that is

<sup>76</sup> . . . τῶν γινομένων κατὰ εἰρμόν αἰτίων καὶ κατ' αἰτίας προκαταβεβλημένης μηδὲν ἄλλως γίνεσθαι δυνατόν. Ἐποίτο δ' ἂν τούτῳ κειμένῳ τὸ καθ' οὗς πάντα γίνεται καθ' εἰμαρμένην μόνα εἶναι ταῦτα δυνατά, ὅσα γίνεται, τῷ πᾶν τὸ μὴ γινόμενον μὴ γίνεσθαι διὰ τὸ [μὴ] κεκωλύσθαι γενέσθαι ὑπὸ τῶν προκαταβεβλημένων τῶν γινομένων αἰτίων.

<sup>77</sup> In Ch. 6 I discuss the details of the way fate works in such cases, including the important question of whether fate *forces* that which happens to happen and *hinders* from happening that which does not (for which see 6.3.5 and 7).

governed by fate, nothing would be genuinely contingent. The fact that there are things contingent according to Chrysippus' modal definitions would be irrelevant, because they do not capture true contingency. True contingency, the idea would be, requires more than the absence of external hindering or necessitating circumstances.

But what are the objective necessary conditions for contingency? and which characteristics of fate annihilate these conditions? One—implicit—answer is given in another argument that tries to show that Stoic fate theory destroys that which is contingent. In *Alex. Fat.* 177.27–78.7 the immutability of fate is taken as a factor that is sufficient to do away with contingency. The argument structure is simple, and in its main part it runs like this:<sup>78</sup>

- (P1) What is fated to happen is unalterable.
- (P2) What is unalterable cannot not happen.
- (P3) It is impossible that that which cannot not happen does not happen.
- (P4) That for which it is impossible not to happen is necessary.
- (C) Hence whatever is fated is necessary.

We know that the Stoics would admit (P1) and (P4) and reject (C). The problem lies with the expression 'can' (*ἐνδέχασθαι*) in (P2) and (P3). In some sense the Stoics would agree that what is unalterable, in so far as it is fated, 'cannot happen in any other way' (cf. the Plutarch quote above), and thus cannot not happen. But *they* would not consider this as relevant to the kind of modalities *they* consider genuine. So again the dispute becomes one about what makes a modality a true, genuine one—a question we may want to leave with the ancients.

But is the point not that fate necessitates events in such a way that it destroys the kind of contingency that is required for moral responsibility and for there being something in our power? This is a point the Hellenistic philosophers were concerned with (see *Cic. Fat.* 39–45 and Ch. 6 below). But it is not the point they are concerned with in the passages discussed in this section. None of the Peripatetic and Middle-Platonist authors is concerned with free-will, with that which depends

<sup>78</sup> The argument is not explicitly directed against the Stoics, but the terminology used and the context leave no doubt that the Stoics were at the very least among those against whom the argument is levelled. In my analysis I disregard the first lines of this argument ('and indeed, if "there will be a sea-battle tomorrow" is true, it will always be the case that a sea-battle came to be in accordance with fate, if indeed all the things that come to be are in accordance with fate.' (trans. Sharples)). My view is that these lines were not originally part of the argument, but that Alexander added them in as a transition from the preceding discussion about the 'sea-battle' to the argument at issue here. The conclusion (C) of the argument suggests that the argument started with (P1). In any event, the first lines do not affect the point I am making. (Gaskin 1993, 86–93, gives an elaborate interpretation of these first lines of the argument.)

on us, or with moral responsibility, when they discuss contingency (τὸ ἐνδεχόμενον), or two-sided possibility. True, that which depends on us is included in the contingent, but so are other things.<sup>79</sup> Accordingly, neither in Plutarch nor in Boethius nor in Alexander does that which depends on us enter the discussion. The criticism is more general. The point at issue is that Stoic fate theory does not square with the existence of contingency—be that according to Chrysippus' own concept (Plutarch, *Alex. Quaestiones*) or according to some other, assumedly objective concept of contingency (Alex. *On Fate*, Boethius). And this was seen as a philosophical problem in its own right: a philosophical theory which eliminates contingency is discredited for that very fact.<sup>80</sup> We have to remember that it is *we* who are preoccupied with the problem of determinism *and moral responsibility*—for Hellenistic and later ancient philosophers this is only one problem among many.

### 3.3 A STOIC REPLY: FATE AND EPISTEMIC MODALITIES

Some later Stoics must have felt challenged by objections like those in Plutarch, Alexander, and Boethius, that Stoic fate and (Stoic) counterfactual possibilities or factual non-necessities are mutually exclusive. Alexander, *Fat.* ch. 10, reports two Stoic counters to this objection, which provide two independent answers; the first introduces as a defence some kind of epistemic possibility; the second plays on the change of truth-value of propositions about the future at the moment when the future event happens (cf. 2.1.1.2). In particular the first suggestion, of epistemic possibility, has often been taken as *Chrysippus'* answer to the objection that his conceptions of fate and the modalities conflict, and accordingly has been extensively discussed in the literature.<sup>81</sup> Here is what Alexander reports, characteristically cramming the whole argument into one sentence:

- (1) But to say that the possible and the contingent are not destroyed if everything happens in accordance with fate, since that is possible to happen which is prevented by nothing from happening even if it does not happen, and that the contradictories of the things that happen in accordance with fate are not

<sup>79</sup> See e.g. [Plut.] *Fat.* 571b–572f.

<sup>80</sup> This explains why the two Stoic replies in Alexander to such accusations (discussed in the next section) do not save moral responsibility either. They are designed as counter-arguments to the particular objection that Stoic fate theory destroys contingency; nothing more.

<sup>81</sup> For an overview of discussions of this passage cf. Sharples 1983a, 134–5 and 285. See also Donini 1973, 349–51.

prevented from happening <and to say that> for this reason those things that do not happen are equally possible,

(2) and to put forward as proof of their not being prevented the fact that the things that prevent them are unknown to us, although there certainly are some, namely the causes of their contradictories happening in accordance with fate, which are also the causes of *their* not happening (since, as they say, it is impossible that in the same circumstances contradictory things happen); but since it is not known to us what they are, because of this, they say, the things that do not happen are not hindered from happening . . .<sup>82</sup> (*Fat.* 176.14–23)

The argument has two main steps, (1) and (2). The course of reasoning is, in short this: In (1) it is stated that the Fate Principle and the existence of counterfactual possibilities, as determined by the Stoic concept of possibility, are not incompatible; and this is justified by the claim that some things (occurrables) that do not happen, namely those which are ‘contradictories’ of that which is fated—are possible in the Stoic sense inasmuch as they are not hindered from happening. This step is basically an application of the Stoic concept of possibility to those things (occurrables) that are ‘contradictory’ to the things that are fated and which therefore do not happen.

In (2), an interpretation of the concept of hindrance that occurs in the modal definitions is put forward:

- The expression ‘unhindered’ in the modal definitions cannot mean uncaused, since the Fate Principle implies that everything is caused and the causes of the things that happen are at the same time the causes of their ‘contradictories’ not happening.
- In the case of some events we do not know the things that cause them to happen, and thus cause their contradictories not to happen. The word ‘unhindered’ in the definition refers to this ‘ignorance’ of the relevant causal factors.
- The things (occurrables) ‘contradictory’ to the things that are fated are possible, if we do not know the causal factors of the fated things, and hence of these ‘contradictories’ of them.
- Therefore, in this way, the Stoic Fate Principle is compatible with the existence of Stoic contingency in the form of counterfactual possibilities.

<sup>82</sup> (1) Τὸ δὲ λέγειν μὴ ἀναιρεῖσθαι πάντων γινομένων καθ’ εἰμαρμένην τὸ δυνατόν τε καὶ ἐνδεχόμενον τῷ δυνατόν μὲν εἶναι γενέσθαι τοῦτο ὃ ὑπ’ οὐδενὸς κωλύεται γενέσθαι, καὶ μὴ γένηται, τῶν δὲ καθ’ εἰμαρμένην γινομένων οὐ κωλυῖσθαι τὰ ἀντικείμενα γενέσθαι· διὸ καίτοι μὴ γινόμενα ὅμως ἐστὶν δυνατόν, (2) καὶ τοῦ μὴ κωλυῖσθαι γενέσθαι αὐτὰ ἀπόδειξιν φέρειν τὸ ἡμῖν τὰ κωλύοντα αὐτά [ἀν] ἄγνωστα εἶναι πάντως μὲν τινα ὄντα ἃ γὰρ ἐστὶν αἰτία τοῦ γίνεσθαι τὰ ἀντικείμενα αὐτοῖς καθ’ εἰμαρμένην, ταῦτα καὶ τοῦ μὴ γίνεσθαι τοῖς αἰτίαι, εἴ γε ὥς φασιν ἀδύνατον τῶν αὐτῶν περιστάσεων γίνεσθαι τὰ ἀντικείμενα ἀλλ’ ὅτι μὴ ἡμῖν ἐστὶ γνώριμά τινα ἃ ἐστὶ, διὰ τοῦτο ἀκώλυτον αὐτῶν τὸ [μὴ] γίνεσθαι λέγουσιν . . .

This is no more than a rough exposition of the passage. The subtleties of the text have been and can no doubt be interpreted in slightly different ways. But I do not think that any attempt at showing that the Stoic argument did not in fact argue for epistemic modalities has been successful.<sup>83</sup>

This argument should be of Stoic origin—besides the defence of the Fate Principle and the similarity of the definition of the possible with that of Chrysippus, the (later) Stoic principle that it is impossible that in the same circumstances ‘contradictory’ things can happen is invoked.<sup>84</sup> (Even if it was Alexander who added this principle here, we should assume that he would do this only because it belongs to the same philosophical position.) However, I think that scholars are mistaken who assert that this passage presents ‘the Stoic concept of possibility’ (implying that there is exactly one, or one prevalent, Stoic position and that this is it), or that this is Chrysippus’ concept of possibility. As this view is still relatively widespread,<sup>85</sup> I briefly argue why it must be wrong.

First of all one should notice that the suggestion that Stoic modalities are in fact epistemic modalities occurs *only once*, whilst Chrysippus’ and Stoic modalities in general are reported quite a number of times (cf. 3.1.4).

Second, in the argument in Alexander the Chrysippean distinction between causes and hindrances seems to be blurred. In Alexander’s report of the account of possibility the expression ‘external’ (ἐκτός), which is part of Chrysippus’ definition, is omitted; on top of that it is explicitly stated that *nothing* (ὅτι οὐδένος) must hinder the thing from happening.<sup>86</sup> Chrysippus introduced *external* hindrances as the second criterion for possibility. His definition concerns neither ‘internal hindrances’ (whether he thought that there could be any is uncertain) nor causes—and definitely not any internal causes.<sup>87</sup>

<sup>83</sup> Such attempts have been made for instance by Stough 1978, 228 n. 9; Celluprica 1977, 73; Reesor 1978, 194; the point is assumed by D. Frede 1982, 286–7, and contemplated by Long/Sedley 1987, ii. 237. Parts of the argument *could* have been added by Alexander, but a straightforward reading of the passage suggests that Alexander is summing up an argumentation that has been presented by some Stoic, or at least by someone genuinely trying to defend the Stoic position.

<sup>84</sup> See below, 8.2, for a discussion of this principle.

<sup>85</sup> Cf. e.g. Sambursky 1959, 75–6; Long 1970, 254–7 and n. 54, 1971, 188–9; Donini 1973, 349–51; Forschner 1981, 113 n. 92; Inwood 1985, 110; Zierl 1995, 169–71.

<sup>86</sup> Further differences from Chrysippus’ modal definitions are the facts that the account in Alexander is about occurrents (γινόμενα) and their happening (γίνεσθαι), not about propositions and truth-values, and that the word for ‘prevent’ is different (κωλύειν instead of ἐναντιοῦσθαι); both changes occur standardly in later texts.

<sup>87</sup> See 1.1.2 (and Bobzien 1998b) for a discussion of Stoic causation. In a similar way Long/Sedley 1987, ii. 237 argue that Chrysippus’ modalities, as reported in Diogenes Laertius, seem to ‘exclude as a case of prevention the mere absence of a causal chain leading to the actualization of a possibility.’ Cf. also the apt illustration of Stoic possibility by D. Frede (1982, 287), who however assumes that Alex. *Fat.* 176.16 ff. is Alexander’s dramatization of Stoic thought.

Moreover, the argument in Alexander assumes that the (unknown) causes of a (contingent) event are at the same time the causes of the not occurring of its 'contradictory' and as such the (unknown) hindrance of its occurring. In Chrysippus' view, on the other hand, everything that happens is caused, but things that do not happen are not *caused* not to happen, nor is everything prevented from either happening or not happening.<sup>88</sup> For Chrysippus and early Stoics causation is an active force that brings about an effect at a body (1.1.2). A hindrance is something that resists or simply stands in the way of the realization of an effect, but does not itself have to be active in this process. That is, Chrysippus does not hold that the causes of an event are (automatically) the causes of the not occurring of its 'contradictory'.

Chrysippus' distinction between causes and external hindrances and consequently his concept of contingency are of importance in his philosophy in several respects. It is relevant for his physics as well as for moral and legal questions, as far as they concern responsibility, blame, punishment, etc. One important function of the Chrysippean modal notions, in particular those of possibility and non-necessity, is that they are a necessary condition for that which depends on us. The argument in Alexander leads straight to the view that, since 'real possibility' is an illusion, 'real depending on us' is a mere illusion as well—because 'real possibility' is a necessary condition for it. This consequence is usually accepted as Stoic or even Chrysippean by the authors who think that the Alexander passage represents 'the Stoics' or Chrysippus.<sup>89</sup> But epistemic modalities cannot fulfil the function Chrysippus wanted his concept of contingency to fulfil.<sup>90</sup> Or rather, their being epistemic does not make them fulfil that function any better. Their introduction completely misses the point Chrysippus wanted to make with his concept of that which depends on us and responsibility as we know them from other sources. For Chrysippus, if an action depends on someone, it does not in the least matter if the causes of that action are known.<sup>91</sup> Such knowledge is not seen as a threat to responsibility, as is clear from his cylinder analogy (see 6.3.3), which is a Chrysippean defence

<sup>88</sup> We have no statement that everything is hindered for Chrysippus. On the contrary, we have the statement that for him of the individual things in the world *many* are hindered (Plut. *Stoic. rep.* 1056d). The use of the word 'many' implies that he does not think that *everything* is always hindered in some way (1.2). Moreover, his modal definition together with his claim that there are contingent things leave no doubt that he did not think that everything that does not happen is physically hindered from happening.

<sup>89</sup> So Sambursky 1959, 75–6; Long 1970, 256; Inwood 1985, 110.

<sup>90</sup> This is also stressed by Sorabji 1980a, 277.

<sup>91</sup> This is not borne out by the interpretations of Donini 1974/5, 42 n. 1 and Gould 1970, 152 n. 1, who assume a connection between responsibility and the ignorance of *internal* factors. However, it seems plausible that such a thought may have led to the formulation of this latter Stoic view on possibility.

of his compatibilism. Thus, the suggestion of epistemic modalities seems even to conflict with Chrysippus' position: certain things that depend on us according to Chrysippus would not be contingent for the author of the argument in *Fat.* ch. 10—namely those in which the causes are known.<sup>92</sup> (For example, Hypatia's wisdom is the cause of her acting wisely, and she deserves praise, even if it is known that she possesses wisdom.)

As a reason *for* the view that the argument is Chrysippean one could state that the passage is a reply to an objection which has been directed against Chrysippus. But the difficulties that arose from Stoic fate theory were extensively discussed at least up until the second century AD and large parts of Alexander's *On Fate* report from a second-century Stoic essay on fate.<sup>93</sup> This text emphasizes the deterministic side of the Stoic position more than, as far as we know, Chrysippus did. Moreover, in the present argument a principle is used which occurs exclusively in reports from this work, viz. that in the same circumstances a cause will bring about the same effects.<sup>94</sup> Naturally, one would assume that the present argument belongs to this Stoic fate theory. At any rate, the mere existence of this later theory makes it clear that the argument need not be early Stoic.

Finally, it certainly speaks against the interpretation of the position of epistemic possibility as *the* Stoic one, that we have in fact a second counter to the *same* objection of the incompatibility of fate and contingency in Alex. *Fat.* ch. 10.<sup>95</sup> For anyone who accepts the first argument this second one becomes redundant. (The opposite does not hold.) But in wording and content this second argument resembles earlier Stoic doctrine rather more than the first,<sup>96</sup> even though it is not fully in line with early Stoic dialectic.<sup>97</sup> I do not assume that it is a reply by Chrysippus (see below, 3.4, for what his reply would have been). But it shows once more that the 'epistemic' interpretation of Stoic modalities was not the only one around.

<sup>92</sup> There is no such conflict in the case of chance (τύχη): Chrysippus clearly claimed that chance events (in the sense of uncaused movement) are non-existent (Plut. *Stoic. rep.* 1045c, cf. 1.3), and that it is wrong to regard chance as a concept with any ontologically relevant application; as far as we know, chance is not a condition for anything in Stoic philosophy. The difference between known and unknown causes is irrelevant for Stoic cosmology. (Inwood 1985, 110 and n. 35, and Zierl 1995, 170–1, seem not to distinguish between Stoic contingency and Stoic chance in this context.)

<sup>93</sup> See 8.1. <sup>94</sup> Cf. 8.2.

<sup>95</sup> Perhaps Alexander wanted to present one argument for the preservation of counterfactual possibilities, the other for the preservation of factual non-necessities.

<sup>96</sup> The passage talks about the modality of propositions (as Chrysippus did according to all our sources); notice especially the use of ἀξίωμα which we have in Alexander otherwise only when he reports earlier Stoic theory. The use of the sea-battle example suggests that Alexander took over this argument from a discussion of Arist. *Int.* 9, possibly from his own commentary on that passage. (Gaskin 1993 discusses this argument in connection with Alexander's view of the 'sea-battle problem'.)

<sup>97</sup> The use of σημαίνειν is not (early) Stoic, as has been pointed out by Schubert (1994, 50 n. 60).



Taking everything together, there is thus no reason to maintain that the introduction of epistemic modalities was Chrysippean, or that epistemic modalities ever represented *the* Stoic modalities.<sup>98</sup> On the contrary, whoever introduced them had already left the ground of early Stoic physics, changed the modal definitions, and not understood Chrysippus' concept of that which depends on us.

### 3.4 CHRYSIPPUS' DISTINCTION BETWEEN NECESSITY AND THAT WHICH IS NECESSARY

One way of putting the alleged contradiction in Stoic philosophy between fate and modality was that if everything happens in accordance with fate, only that which actually happens is possible, and hence counterfactual possibility, contingency, and two-sided possibility are eliminated. A more straightforward charge of inconsistency was that the Stoics maintain on the one hand that everything is fated and that fate is synonymous with necessity, so that accordingly everything happens by necessity, whereas, on the other hand, they claim that not everything that happens is necessary but some things are both possible and not necessary.

A closer look at the evidence reveals that this alleged inconsistency (all things are necessary—not all things are necessary) is at least not a justified criticism of Chrysippus but—perhaps deliberately—confounds separate parts of his philosophy.<sup>99</sup> The solution is, in short, as follows: Chrysippus had a cosmological and a logical concept of necessity; these two concepts had both different origins and different realms of application and were also referred to by different expressions, although these expressions share the same linguistic root. On the one hand there is Necessity (*Ἀνάγκη*), the universal physical power which had already been equated with Fate by Zeno; on the other, there is that which is necessary (*τὸ ἀναγκαῖον*), which belongs to Chrysippus' modal logic as one of the four modalities. Chrysippus' opponents mixed up the terminology and realms of the concepts.

#### 3.4.1 *The textual evidence*

First some textual evidence for a Chrysippean distinction between Necessity and that which is necessary: Necessity (*Ἀνάγκη*) as a divine power is

<sup>98</sup> So also noted in Long/Sedley 1987, i. 235.

<sup>99</sup> Scholars have tried to explain (away) this alleged contradiction in various ways, but in my view so far not fully successfully. So for instance Rist 1969, 122–8, M. Frede *ap.* Sorabji 1980a, 274–5; cf. below and 6.3.7.

an old concept.<sup>100</sup> Some of the Presocratics seem to have used Necessity as a synonym to Fate.<sup>101</sup> Plato, in the Myth of Er, depicts Necessity as the mother of the Fates (*Μοῖραι*).<sup>102</sup> It is likely that Zeno adopted the pair of concepts 'Necessity' and 'Fate' from Presocratic works, from Plato, or from traditional thought, and incorporated them into his physics. Given that he reduced the world to two basic, material, principles, the active and the passive, he appears to have furnished the active one with all the traditional names for active powers.<sup>103</sup> It seems that confronted with the alternatives of either taking over the traditional names or claiming that they are empty, Zeno and his followers generally preferred the former option. Moreover, Fate and Necessity were a pair of concepts which carried with them the right connotations, tradition, and dignity to be chosen as names for the active principle. For Cleanthes we have no evidence that he used Fate and Necessity synonymously. Unlike both Zeno and Chrysippus he did not equate Fate and Providence (Calc. *Tim.* 144, cf. 1.4.1). Hence there is a chance that he did not equate Fate and Necessity either. On the other hand we know that Cleanthes took part in the discussion of the Master Argument, holding among other things that not every true proposition about the past is necessary (*ἀναγκαῖον*) (Epictetus *Diss.* II 19.1–4). Hence he was clearly in some way concerned with modal logic as it had been developed by Diodoros Cronus and Philo; and he was familiar with the different modal notions, including the notion of that which is necessary. Chrysippus thus already inherited both the concept of Necessity as a physical power and the modal concept of that which is necessary, which belonged to logic. There is evidence for his use of both.

First, the term 'Necessity': The sources which report that Chrysippus used 'Fate' and 'Necessity' synonymously are predominantly those which produce a list with synonyms for god, the one active power. The word used for necessity is always *Ἀνάγκη*.<sup>104</sup> These passages all stem from

<sup>100</sup> Cf. e.g. Gundel 1914, 1–41, Schrekenberger 1964, chs. 4.2 and 5.2.

<sup>101</sup> See Stob. *Ecl.* I 72–3, [Plut.] *Epit.* 1.25–6 (*DD* 321) 'Parmenides and Democritus: everything is in accordance with Necessity which is Fate and Justice and Providence and creating the universe. Leucippus: everything is in accordance with Necessity, which is the same as Fate.' However one has to be careful here; some of these statements may well be later ascriptions to the Presocratics.

<sup>102</sup> *Rep.* X, especially 617b–c; cf. *Leg.* XII 960c.

<sup>103</sup> Lactantius *Div. inst.* 4.9 about Zeno: 'Reason . . . which he calls both fate and the necessity of things and god and the soul of Zeus' ('λόγον . . . quem et fatum et necessitatem rerum et deum et animum Iovis nuncupat'); similarly Tertullian, *Apol.* 21 (cf. 1.4.1). These sources are rather late, hostile, and Christian, but we have no reason to question their reliability on this point.

<sup>104</sup> Stob. *Ecl.* I 79 equates Fate, Truth, Cause, Nature, and Necessity; Plut. *Stoic. rep.* 1056b Zeus, Fate, Atropos, Adrasteia, Necessity, and Destiny (*πεπρωμένη*); Philod. *Piet.* c. 4.12–c.5.3 (Henrichs, *DD* 545) Zeus, Nature, Fate, Necessity and others (cf. 1.4.1).

Chrysippean writings on physics: from his *On Gods*, *On the World*, *On Fate*, and probably *On Nature*.

Diogenianus (in Eus. *Praep. ev.*) uses 'Necessity' synonymously with 'Fate' in his reports from Chrysippus' books on fate.<sup>105</sup> He also uses the verb 'to be necessitated' (*καταναγκάζεσθαι*).<sup>106</sup> Almost all occurrences of *ἀνάγκη* and *καταναγκάζεσθαι* occur in the introduction to, concluding sentence of, or subsequent criticism of, Chrysippus' doctrine, and thus could be paraphrases or additions by Diogenianus himself.<sup>107</sup> It is generally difficult to decide how much of Diogenianus' report is quotation or at least retains Chrysippus' terminology, and how far he paraphrases in first- or second-century Epicureanese. Still, the phrases connected with the representation of Chrysippus' position all have the physico-cosmological terminology, 'Necessity' used synonymously with 'fate', 'to be necessitated' for 'to happen in accordance with fate'. (Perhaps the Stoics chose the verb *καταναγκάζεσθαι* in parallel to 'happens in accordance with necessity' (*κατ' ἀνάγκην*), as the verb *καθευμάσθαι* (to be fated) can be seen to convey the idea of 'to happen in accordance with fate' (*καθ' εἰμαρμένην*).)

The source of Stob. *Ecl.* I 78.4 and Theodoret, VI 14 (*DD* 545) has it that Chrysippus equated 'that which is fated' (*τὸ εἰμαρμένον*) and 'that which is necessitated' (*τὸ καταναγκασμένον*). Both expressions are not otherwise handed down for early Stoics. Perhaps this is another—later—way of saying that Chrysippus equated 'Fate' and 'Necessity', switching from the divine power to the objects it governs.<sup>108</sup> But, although 'that which is necessitated' is neuter singular, it is in any case a form of 'to be necessitated' (*καταναγκάζεσθαι*) and differs from 'that which is necessary' (*τὸ ἀναγκαῖον*).

According to all these testimonies Necessity, etc. are clearly understood by Chrysippus as governing *all* things,<sup>109</sup> just as fate does, and the terms are never contrasted with something that is non-necessary.<sup>110</sup> (Chrysippus'

<sup>105</sup> Eus. *Praep. ev.* 4.3.7; 6.8.6; 6.8.10, last sentence in connection with 6.8.8, first sentence.

<sup>106</sup> Eus. *Praep. ev.* 4.3.11; 6.8.25. In both cases 'to be necessitated' is obviously used as an equivalent to 'happening in accordance with fate'.

<sup>107</sup> *Ἀναγκαῖος* occurs only in a passage in which Diogenianus presents his own criticism (Eus. *Praep. ev.* 6.8.37).

<sup>108</sup> I rate low the reliability of the text as a source for Chrysippus.

<sup>109</sup> Later Stoic authors, too, used the word 'necessity' meaning 'the one active all-encompassing power', or as synonymous with fate. Cf. Sen. *Nat. quaest.* II 36 where fate is defined as 'the necessity of all things and actions which no force may break' ('*neccissitas rerum omnium actionumque quae nulla vis rumpat*').

<sup>110</sup> In view of such a high number of texts which report that Chrysippus claimed that everything happened in accordance with necessity, attempts to discredit all the fragments which connect necessity and fate (in order to keep Chrysippus' doctrine consistent) by blaming the hostile sources for distortion (e.g. for adding in *ἀνάγκη*), seem not very convincing.

*critics* occasionally, and un-Stoically, claim incompatibility of Necessity and that which depends on us.)

In contrast, the evidence for Chrysippus' use of 'that which is necessary': All Greek sources that report Stoic or Chrysippean modal logic have the expression 'necessary'; the word Necessity is not once employed. The texts which give Chrysippean modal doctrine have been adduced above in 3.1.4. And, as has been shown, there can be no doubt that Chrysippus believed that there are true non-necessary propositions, including some which state what happens (cf. 3.1.4, 3.2).<sup>111</sup>

We can conclude that Chrysippus' use of terminology is consistent and precludes confusion: physical necessity is throughout referred to by the noun 'Necessity'. A corresponding verb occurs 'to be necessitated'. The adjective 'necessary' is not found in this context. The expression used for the modality of 'necessity' is 'that which is necessary'; in the context of modal logic neither 'necessity' nor 'to be necessitated' ever occurs. It is unlikely that the choice of words is a coincidence. There are two further indications that it is not: First, even some hostile sources which, in their criticism of Chrysippus, bring logic and physics together, stick to that terminology.<sup>112</sup> Second, there are a number of comparable cases in which the Stoics intentionally used the feminine (abstract) noun on the one hand and the neuter singular participle with definite article on the other in order to express different philosophical concepts. Examples are 'truth' (ἀλήθεια) and 'true' (ἀληθές) (SE *M* 7.38) and 'cause' (αἰτία) and 'that which causes' (αἰτιον) (Stob. *Ecl.* I 138.25, see above 1.1.2). Moreover, in both these cases the feminine noun is also used for the one active power. Hence as far as the Greek sources that report Chrysippean doctrine are concerned, the result is unambiguous.

<sup>111</sup> Later sources no longer use modal notions as properties of propositions but only of things that do/don't happen (γίνεσθαι). They also use the Necessity Principle interchangeably and often combined with the Fate Principle. The then frequently used phrase ἐξ ἀνάγκης seems not to refer to some divine active principle but to stem from Peripatetic philosophy. Alexander in his *On Fate* uses 'everything happens from necessity' (*Fat.* 172.8–9; 173.21–2; 175.1; 182.25–6; 191.18; 201.23–4; 202.5–6) as frequently as 'everything happens in accordance with fate', often combining both phrases into one (164.8; 171.26–7; 200.14–15); but we cannot rule out that the Necessity Principle is his addition. On the other hand, *Fat.* ch. 10 leaves no doubt that the Stoics from whom Alexander reports did not claim that everything that happens is necessary—or at least that not all of them did. Boeth. *Int.* II, uses the Necessity Principle much more often than the Fate Principle (e.g. 192.21–3, 195.10–11, 217.16, 233.17, 23–4, 234.8–9, 235.5); the prevailing formulation is 'everything is subordinated to necessity'; he also uses the nouns *possibilitas* and *necessitas* for modal notions.

<sup>112</sup> Cf. Plut. *Stoic. rep.* 1055d–f with 'everything true will be necessary' (πάν . . . ἀληθές ἀναγκάϊον ἔσται) for the logical notion versus 'the most sovereign necessity of all' (τῇ κυριωτάτῃ πασῶν ἀνάγκῃ) as the physical notion (discussed in 3.2).

## 3.4.2 Necessity and that which is necessary and their relation to fate

Although Chrysippus' two concepts of necessity are of distinct provenance and belong to different parts of Stoic philosophy, matters are complicated by the fact that Chrysippus used them both in his discussion of fate, and that they were applied—at least indirectly—to the same objects. What were their respective roles in Chrysippus' fate theory?

'Necessity' has the same extension as 'Fate'; it denotes the same one active power which administers the universe and which governs all events and qualitative states (all occurrents). It belongs to early Stoic cosmology. The name 'Necessity' may originally have been taken over from a personified divine power, who allotted a personal fate to human beings. But we can assume that Zeno and Chrysippus did not envisage Necessity as a personified deity. They also certainly had some particular attributes of the one active power in mind which made 'Necessity' a suitable name, and these attributes made Necessity pertinent to the fate discussion. All motions and qualitative states occur in accordance with Necessity. What is it that Necessity bestows on them? Which were the attributes commonly associated with it?

A look at the various adjectives employed by Chrysippus in order to describe the workings of fate which have connotations with 'necessity', is instructive: we find 'inexorable / untransgressable' (ἀπαράβατος), 'inflexible' (ἄτρεπτος), 'invincible' (ἀνίκητος), 'unconquerable' (ἀνεκβίαστος), 'unpreventable' (ἀκώλυτος), 'immutable' (ἀμετάβλητος) and 'unchangeable / irrevocable' (ἀμετάθετος).<sup>113</sup> These adjectives all give various aspects of the *same* idea of necessity. They all presuppose that things have been *predetermined* by fate or necessity. None of them could be applied to fate if there were not something that is fated in such a way that it is determined before it happens. They all emphasize the point that whenever something is fated to happen, it cannot not happen. By neither human beings nor gods can it be conquered, changed, revoked, transgressed, so as to not happen. One reason for the abundance of inevitability predicates was presumably that having taken over traditional names like 'Fate' and 'Destiny' (πεπρωμένη), Zeus, etc. for the one active power, the problem occurred how to explain the highly philosophical, abstract meaning the Stoics gave these terms, and how to reject some of their traditional connotations. Among other things, the Stoics had to make clear that their Fate was not an anthropomorphic power with whom one could bargain; whom one could influence; who could be manipulated according to one's wishes provided one had the right means (e.g. witchcraft) at one's disposal. Whence probably their emphasis not only on the fact that fate, although

<sup>113</sup> Cf. Gell. *NA* 7.2.2; Plut. *Stoic. rep.* 1055d, 1056b, Eus. *Praep. ev.* 6.8.9, Stob. *Ecl.* I 79; see also *Ecl.* I 81 (Plut. fr. 15.2).

teleological, is not some trans-worldly, non-physical power, but inner-worldly and corporeal, but also especially on the immutability of fate. It is very likely that the name 'Necessity', used for fate, was meant to express exactly this factor, the property of the invariability or inevitability of fate.<sup>114</sup> The main Stoic reason why fate is immutable, etc. is that there is nothing that *could* hinder or change it, simply because fate encompasses everything that there is, and that could have an active influence on anything in the world (cf. 1.2).

This notion of necessity clearly differs from others we encounter in antiquity. It has nothing to do with logical necessity, nor with the conceptual or essentialist necessity as it occurs in Philo and in the first disjunct of Chrysippus' necessity definition, 'that which is not capable of being false (as far as its nature is concerned)'. Equally, it is not the same as necessitation by physical force or compulsion, and accordingly, it also has nothing to do with the second disjunct of Chrysippus' necessity definition. None of the inevitability adjectives describes *in which way* Necessity, alias fate, works. All they do is stress that once something is predetermined, it will definitely come true. Whether this is so because of the nature of the things, because of external influence factors, or because of still something else is left open, and is not part of this concept of necessity. We know of course from elsewhere that the way the realization of fate works is through the network of causes. And causation, as the Stoics understand it (see Ch. 6), neither involves logical necessity, nor *requires* external force, or any force for that matter.

But how are Chrysippus' modalities related to fate? 'That which is necessary, non-necessary, etc. are in the first instance propositions. Of them some, when actualized or true, have occurrents correlated to them, others do not. For instance 'virtue is beneficial', Diogenes Laertius' example of a necessary proposition, seems not to state that something occurs. It is always true according to Stoic ethics. We should assume that it was seen as not capable of being false, and hence of satisfying the first disjunct of the necessity definiens. 'Dio is walking' is an example of a proposition which—whenever asserted—states that something occurs (though it has different occurrables correlated to it at different times). This proposition is Diogenes' example for that which is non-necessary. The fact that this proposition is non-necessary tells us something about (i) its general consistency, and (ii) Dio's present and future walking: namely that there are times at which nothing external hinders Dio from walking. Nothing more. There is thus no immediate inconsistency in the claim

<sup>114</sup> We do not have Chrysippus' etymological explanation of 'Necessity', but the standard etymology in later antiquity connects it with 'invincible' (*ἀνίκητος*); cf. e.g. Moraux 1984, 53.

that something happens in accordance with Necessity, and that a proposition correlated to it is non-necessary. From the point of view of Stoic cosmology all occurrences of Dio's walking in the present and future are 'in accordance with Necessity'; they are caused and their coming true is inevitable. This is perfectly compatible with the fact that 'Dio is walking' is non-necessary; i.e. that there are times at which Dio is not externally prevented from walking. (Even if we assume the crucial case of contingency, i.e. that there are times at which Dio is neither externally prevented from walking, nor externally forced to walk, no problem ensues.)

There is hence no contradiction. It seems unproblematic that one and the same thing is causally predetermined and inevitable, and that there are no external hindrances that prevent it from happening or force it to happen. The distinction is straightforward, historically plausible, easy to grasp, and in line with Stoic physics and logic. As we have seen in 3.1.4, at least for Chrysippus it is also clearly corroborated by our sources. It should be plain, however, that by making this distinction and accordingly retaining consistency in this point, the problem of the integration of that which depends on us, and of moral responsibility, into Stoic theory of fate is not even touched upon. This problem is not how one and the same occurrent can be necessary and yet a proposition that states it non-necessary. Rather the difficulty is how one has to understand that something is neither hindered from happening nor forced to happen (and that the true proposition stating it is both non-necessary and possible), *although* it is in accordance with fate—regardless of whether the latter is called 'Necessity'. This is not a matter of terminology—which is to a certain extent historically grown and in that sense incidental—but of how to bring into line two different parts of one philosophical system.

Finally, two remarks on some presumably post-Chrysippean phrases used to refer to necessity in the context of fate, which we are now in a position to understand better. There is first the expression 'necessity of fate' (*necessitas fati*). The Latin phrase occurs frequently from the first century BC onwards. We find it several times in Cicero (e.g. *Fat.* 20, 38, 39), but not where he presents Chrysippus' position. Gellius repeatedly uses the phrase in his report of Chrysippus' compatibilism (*NA* 7.2.11, 13, cf. 5 and 8). It also occurs in Boethius (e.g. *Cons.* IV 16, *Int.* II 217.21, 27, 218.3). I have found the Greek counterpart ἀνάγκη εἰμαρμένης only from the first century onwards. It does not occur in reports from Chrysippus.<sup>115</sup> One may venture the following explanation of the emergence of the

<sup>115</sup> Justin, *Apol.* 2.7 writes about the Stoics: 'Everything happens in accordance with the necessity of fate' (καθ' εἰμαρμένης ἀνάγκην πάντα γίνεσθαι), which is clearly a late modification of the Fate Principle. In a non-Stoic context: Plut. *Quaest. conv.* 740d; Max.Tyr. 5.4b ἡ εἰς εἰμαρμένης ἀνάγκην. Rist 1969, 125, cites Marcus Aurelius, 12.14; but note that most manuscripts have ἀνάγκη εἰμαρμένη.

expression 'necessity of fate': once an inconsistency between Stoic fate doctrine and Stoic modal notions had been alleged, and the connection between cosmological 'Necessity' and 'that which is necessary' from logic drawn, a means to distinguish the different types of necessity was needed. The phrase 'necessity of fate' was then coined to delimit this kind of necessity from other kinds. This conjecture is backed up by the fact that where authors use the phrase, it sometimes refers to cosmological Necessity, sometimes to 'necessity from force'—a sure sign that it is not Chrysippus who talked about the necessity of fate or coined it as a technical term. Thus in Gell. *NA* 7.2.11 and 13 'necessity of fate' refers to Chrysippus' all-embracing Necessity, expressing inevitability. Cicero on the other hand writes about Chrysippus in *Fat.* 39 '... so that he *unwillingly* confirms the necessity of fate' ('... ut necessitatem fati confirmat invitus'). Here, in the context of *the very same* Chrysippean argumentation as in Gellius, 'necessity of fate' is used to refer to the necessity from force Chrysippus wants to escape (cf. Cicero *Fat.* 41).

Second, there is a later distinction of types of necessity, of which we find two variations in Alexander in the context of fate: one appears to be later Stoic (*Fat.* 181.21–5), the other could be later Stoic or Peripatetic (*Quaest.* I 4 10). This is the distinction between the necessity from force (*ἀνάγκη ἐκ βίας*), and the necessity 'resulting from its being impossible for that which has a nature of <a certain> sort to be moved at that time in some other way and not in this, when the circumstances are such as could not possibly not have been present to it' (*Fat.* 181.23–5, trans. Sharples). The passages imply that some things, but not all, happen in accordance with the necessity of force. It is unclear whether the other type of necessity encompasses *all* occurrents, or only those that are 'in accordance with their nature' (*κατὰ φύσιν*) and not from force. (The latter is the kind of occurrent under discussion in the passage from *On Fate*.) Either way, this is the necessity with which fate works. The quoted passage in Alexander's *On Fate* clearly characterizes it as a necessity of the inevitability type which does not involve any physical force. The passage in the *Quaestio* identifies it with the series of causes, and with fate, as a whole. All this suggests that it is a later version of the early Stoic cosmological Necessity. The concept of necessity by force on the other hand may have been taken over from Peripatetic theory,<sup>116</sup> or alternatively it could correspond to the second disjunct of the Stoic definition of necessity.

<sup>116</sup> e.g. Aristotle's necessity by force (*βία*), cf. *Met. A* 1072<sup>b</sup>11–13.



## Divination, Modality, and Universal Regularity

We have no reply by Chrysippus to arguments that play off his theory of fate against his modal theory directly; these arguments seem to stem from a later date. There is, however, in Cicero's *On Fate* an argument against the Stoics that brings together Chrysippus' modal theory and divination, and to which Chrysippus seems to have responded. This is the one Cicero reports in *Fat.* 11–14, with Chrysippus' counter in *Fat.* 15. Neither argument nor reply is recorded elsewhere. The argument tries to show up a conflict between Chrysippus' acceptance of divination and his concepts of possibility and non-necessity, and, since the latter form a necessary condition for that which depends on us, Cicero introduces the argument as leading to a conflict between divination and that which depends on us.<sup>1</sup>

This much-discussed passage provides only indirect criticism of Chrysippus' doctrine of fate. Here is a preliminary outline of the overall course of reasoning: Chrysippus accepts the existence of divination as a science (*Fat.* 11). He uses the existence of divination to support his fate theory (*Fat.* 11).<sup>2</sup> Divination as science, together with certain Stoic modal principles, allows one to infer that that which has been predicted as true is necessary (*Fat.* 14) and that which has been predicted as false is impossible (*Fat.* 12). But according to Chrysippus' modal theory there are future truths that are non-necessary and future falsehoods that are possible (*Fat.* 13). Hence there appears to be a contradiction between the statements that all (predicted) future truths are necessary and that some are non-necessary; and between the statements that all (predicted) future falsehoods are impossible and that some are possible. (This conclusion is problematic.) As a result, Chrysippus has to give up either divination—and thus lose the support for the Fate Principle—or his

<sup>1</sup> Cf. the beginning of the passage 'All this is done away with if the power and nature of fate are confirmed by the theory of divination.' (*Fat.* 11). The things which are 'done away with' are *voluntas*, *studium*, and *disciplina* from the previous sentence. For Cicero they stand for the things that depend on us.

<sup>2</sup> See quote in previous note. We know from other sources that Chrysippus supported his conception of fate by reference to the science of divination (cf. 2.2). Cicero evidently alludes to this.

concepts of possibility and non-necessity, a move that would destroy that which depends on us. Thus the outcome is a (weaker) variant of the standard dilemma: fate or that which depends on us? Chrysippus' defence is in short that he rejects the argument by denying a presupposition that underlies one of its premisses (*Fat.* 15); he has then, as far as this argument is concerned, to give up neither divination and its support for the Fate Principle, nor his modal notions. Chrysippus' reply is subsequently ridiculed by Cicero (*Fat.* 15–17), but this counter is of little philosophical importance.

The opponent's critique in *Fat.* 11–14 is discussed in 4.1. It is of interest since it is early evidence for the ancient debate over prediction and determinism; in particular, because it contains an argument that argues for the determinedness of the future from the connections that exist between past and future events. Chrysippus' reply has been much discussed in the context of ancient concepts of the conditional. It is important for our purposes since it also provides invaluable information about his theory of determinism. It is the topic of 4.2.

#### 4.1 OBJECTION: DIVINATION AND STOIC CONTINGENCY ARE INCOMPATIBLE

The passage *Fat.* 11–14 is anything but a homogeneous, lucid, continuous piece of reasoning. The text flaunts various uncertainties and inconsistencies. We are, and will perhaps always remain, in the dark as to who the opponents were, from how many discussions or arguments Cicero draws, what the original course of the debate was, and whether some of it was perhaps devised only after Chrysippus. The opponent's argument is usually regarded as one argument that is reported twice, the second passage (*Fat.* 14) providing a summary of the first (*Fat.* 12). As will become apparent, it fits the text better if one assumes that there were actually two arguments. For reasons of simplicity I begin with a discussion of the second, since it is shorter and relatively straightforward. But first some remarks about divinatory theorems and astrology.

##### 4.1.1 The divinatory theorem

The introductory section *Fat.* 11 supplies a few prerequisites which are invoked in the subsequent argumentation: that divination exists and that it is a science (*ars*);<sup>3</sup> that *qua* science it must be based on theorems

<sup>3</sup> See above 2.2.1 for a brief presentation of Stoic theory of divination.

(θεωρήματα); that it is the function of divination to predict the future.<sup>4</sup> All these points seem to have been supported by Chrysippus.

The divinatory theorem that is used as an example by Cicero would be classified as astrological, and is introduced as such (*Fat.* 12); it is a universally quantified conditional and runs 'if someone was born at the rising of Sirius, he will not die at sea'.<sup>5</sup> This seems to have been not a genuine astrological theorem but a fictitious example made up for the occasion by Cicero (or his source). For, first of all, Cicero claims neither that the example is genuine, nor that he takes it from the Stoics.<sup>6</sup> Secondly, although astrological correlations between place or kind of death and constellation of stars can be found e.g. in Ptolemy's *Tetrabiblos*, astrological prediction did not usually refer to fixed stars but to the positions of the planets.<sup>7</sup> Thirdly, the consequent of the example theorem ('he will (not) die at sea') was used by Diodorus and Chrysippus in the context of the discussion not of divination but of that which is possible (*Plut. Stoic. rep.* 1055e–f, *Boeth. Int.* II 235), whereas the rising of Sirius features in a different astrological theorem, which Cicero may have taken from Posidonius (cf. *Div.* I 130). Finally, although astrology clearly played a significant role in later Stoic theories of divination, apart from this example in *Fat.* 12–14 we have no evidence that Chrysippus dealt with astrology in the context of divination.<sup>8</sup> However, the question what role astrology played in Chrysippus' philosophy is not really germane to the discussion in *Fat.* 11–17. What matters is that, in general, Chrysippus accepted that the diviners were able to detect and employ universal theorems, and that the form of Cicero's illustrative theorem is representative for those theorems Chrysippus had in mind.

#### 4.1.2 The second argument against the Stoics

(1) For if this is a true conditional 'If you were born at the rising of Sirius, you will not die at sea', and the first <proposition> in the conditional, 'You were born at the rising of Sirius', is necessary, (2)—for all true <propositions> about the past are necessary, as Chrysippus, dissenting from his teacher Cleanthes, holds, since they are immutable and cannot change from true to false—(3) if

<sup>4</sup> A common alternative function of divination in antiquity was to give warnings or advice for actions.

<sup>5</sup> Si quis . . . oriente Canicula natus est, is in mari non morietur.

<sup>6</sup> 'Let the astrological theorems then be of this kind' *Fat.* 12 ('Sint igitur astrologorum percepta huius modi'—although some manuscripts have *sunt*).

<sup>7</sup> Cf. Long 1982, 168 n. 9.

<sup>8</sup> There are no signs that Chrysippus had any particular interest in astrology. Of course, from this one cannot infer that he disregarded it altogether. (For instance, Chrysippus' definition of divination is reported in *SE M* 9.132 together with astrology as one of its branches.) But it can hardly have played a dominant role in his theory of divination. See also Long 1982, 167–9, and cf. Barton 1994, 21–3, 33–5, on the—almost non-existent—evidence for astrology in 3rd cent. BC Greece.

hence the first <proposition> in the conditional is necessary, then also the one which follows is necessary. (4) Although according to Chrysippus this seems not to hold in all cases.<sup>9</sup> (Cic. *Fat.* 14)

The argument itself is short and its logical structure transparent. It works on the meta-level, making claims about the truth and necessity (i.e. about properties) of certain propositions.

(P1) The conditional 'if you were born at the rising of Sirius, you will not die at sea' is true.

(P2) Its antecedent 'you were born at the rising of Sirius' is necessary.

(C) Therefore its consequent, 'you will not die at sea', is necessary as well.

The first premiss (P1) is derived by instantiation from the illustrative theorem of the astrologers in *Fat.* 12, 'If someone was born at the rise of Sirius, he will not die at sea', which is assumed to be valid. (The use of the second person singular as subject term in a paradigm argument is familiar from formulations of the Lazy Argument (5.1.1) and the Mower Argument (2.1.2.2).) The truth of the proposition 'You were born at the rise of Sirius' is assumed, and the second premiss (P2) is then established with the help of the principle that all true propositions about the past are necessary. This principle was accepted as valid by Chrysippus and Diodorus (Epict. *Diss.* 2.19). Cicero mentions two reasons why such propositions are necessary: the first is that propositions about the past are immutable; the second, that they cannot change their truth-value from truth to falsehood. I take it that this is the ground for their immutability, i.e. that the second reason is a specification of the first. For the principle to make sense, 'proposition about the past' has thus to be understood as 'all propositions that state past occurrents', or in some similar way.<sup>10</sup>

Since Chrysippus accepted this justification in his discussion of modal logic, true propositions about the past must have satisfied his criteria for necessity, i.e. one disjunct of the disjunctive definition of that which is necessary (see 3.1.4). Either he must have taken them to be *not capable* of becoming false (as they *cannot* switch to falsehood) and thus to fall under the first part of the definition.<sup>11</sup> Or he must have thought that they are

<sup>9</sup> (1) Etenim si illud vere conecitur: 'Si oriente Canicula natus es, in mari non moriere', primumque quod est in conexo: 'Natus es oriente Canicula', necessarium est (2)—omnia enim vera in praeteritis necessaria sunt, ut Chrysippo placet dissentienti a magistro Cleanthe, quia sunt inmutabilia nec in falsum e vero praeterita possunt convertere—(3) si igitur, quod primum in conexo est, necessarium est, fit etiam, quod consequitur, necessarium. (4) Quamquam hoc Chrysippo non videtur valere in omnibus.

<sup>10</sup> For in Stoic logic e.g. the proposition about the past 'Dio never went to Athens' would turn from true to false if Dio at some point goes to Athens for the first time, although before that it was a true proposition; cf. also next note.

<sup>11</sup> If propositions state past occurrents (e.g. 'Axiothea went to Megara', assuming she went), they indeed cannot change their truth-value from truth to falsehood; cf. Bobzien 1986, 76 ff.

*hindered from being false* by external circumstances, in accordance with the second disjunct. I consider the first option more plausible.

It is essential to the argument that the antecedent of the conditional states a *past* occurrent. And indeed, even the universal conditional in *Fat.* 12 from which the first premiss (P1) has been obtained, has its antecedent in the past tense. Although in the case of the universal theorem what matters is presumably not so much which tense antecedent and consequent are in, but rather that in any instantiation there is some time span assumed to lie between the occurrent of the antecedent and that of the consequent. For only then can an instantiation connect the future with the necessity of the past.<sup>12</sup>

In order to be able to derive the conclusion (C), one has to assume some inference scheme or rule of the kind: 'if a conditional is true and its antecedent necessary, then its consequent is necessary as well'. Or, in a more familiar formulation: from that which is necessary nothing non-necessary follows. This principle was both known and generally accepted in ancient logic (see below). I shall refer to it as the Necessity-from-Necessity Rule.

However, the added clause (4) 'Although according to Chrysippus this seems not to hold in all cases' tells us that Chrysippus did not accept this principle for all propositions. This proviso should refer to Chrysippus' denial of the second proposition of the Master Argument, which is parallel to the present principle and states that from that which is possible nothing impossible follows (Epict. *Diss.* 2.19). The Necessity-from-Necessity Rule can be derived from this principle within Stoic logic.<sup>13</sup> (4) is then best understood as a pre-emptive move by Chrysippus' opponent: Chrysippus could assert that the present case is one of the exceptions in which the principle does not hold. In that case the opponent's argument would not threaten the consistency of Chrysippus' philosophy. The opponent discards this possible objection—and as Chrysippus' reply in *Fat.* 15 shows, rightly so. There Chrysippus demands a change of formulation of the 'first premisses' of arguments of the type at issue (see 4.2), and he would hardly have demanded this had he regarded them as cases that were exempted from the Necessity-from-Necessity Rule.<sup>14</sup>

<sup>12</sup> Instantiations with both antecedent and consequent in the future tense ('If  $x$  will happen/ if you will  $\phi$ , then you will experience  $y$ ') would not be suitable in the context of this argument, since the necessity of the antecedent could not be established. *Qua conditional* prophecies (for which cf. 4.2.5) such statements might of course be useful as warnings or advice. But that is a different matter.

<sup>13</sup> Cf. M. Frede 1974, 87–8, 116–17, Bobzien 1986, 112–13, Sharples 1991, 169.

<sup>14</sup> One can provide a clear criterion for the cases in which the two principles did not hold for Chrysippus; see Kneale 1962, 127–8; Bobzien 1986, 113. The interpretation that Chrysippus first tried to refute the arguments in *Fat.* 12 and 14 by way of the denial of the Necessity-from-Necessity Rule which Sorabji 1980a, 263, reads into Kneale 1962, 126, and M. Frede 1974, 88, and which he accepts as correct is perhaps an over-interpretation. As far as I can see, the principles were rejected in order to rebut the Master Argument—but of course we know next to nothing about the whole debate.

These special cases having been ruled out, the argument would then seem valid even to Chrysippus. The conclusion inferred ('you will not die at sea' is necessary) is a singular statement only, but it is plain from the context that the argument stands in as a paradigm for all arguments of this form with a divinatory theorem of the kind described as first premiss. The result of the argument would then be that whatever has been truly predicted by way of mantic theorems (of the kind described) is necessary before it happens.<sup>15</sup>

What shall we make of this argument, which Chrysippus for one seems to have regarded as valid (see 4.2.1)? First, we should note that for its validity the necessity of the consequent cannot be just any kind of necessity, but must be the same as that of the antecedent. It would for example be absurd to think that the necessity of the past of the antecedent would bestow logical necessity on the consequent. Rather (whether or not Chrysippus was aware of this) it follows, if anything, that certain future occurrents would be necessary in the way in which past occurrents are. But what does that mean? True propositions that state past occurrents are necessary because they are immutable and cannot change truth-value. So 'Fabius will not die at sea' is deduced to be immutable and unable to change truth-value in the way true propositions that state past occurrents are. But would Chrysippus not agree on this point? For he holds that the future is immutable. This is one of the features of fate for which we have evidence aplenty (1.4.2). Future occurrents are immutable in the sense that if they will happen, they cannot not happen: the future is linear. However this kind of inexorability of future occurrents is exactly what Chrysippus refuses to classify as necessary (3.4.2). So, either Chrysippus cannot consistently call true propositions that state past occurrents 'necessary', but true propositions that state future occurrents not; or there must be an element in the necessity of the past which goes beyond *this* kind of immutability.

One such element would be this: propositions that state a future occurrent can change their truth-value: for instance, 'Fabius will die on land' will not be true after Fabius' death. This cannot happen to propositions that state past occurrents. This way of reasoning, although in line with the Stoic concept of proposition, elegantly bypasses the real issue. Which did not prevent some Stoics from putting it forward (cf. Alex. *Fat.* 177.6–14). Unfortunately, this reasoning does not work with negative predictions like 'You will *not* die at sea', unless one follows the Russell line of reasoning, as some Stoics seem to have done, and assumes that if there is no referent to the subject of the proposition, the proposition is false (cf. Alex. *An. pr.* 402).

<sup>15</sup> After the presentation of this (i.e. the second) argument (*Fat.* 14) Cicero states 'but still, if there is a natural cause why Fabius should not die at sea, then it is not possible for Fabius to die at sea'. This remark, added presumably to back up the argument(s), seems oddly out of place. For its interpretation see below 4.2.3.

What *other* differences there are between past-based necessity and future immutability, we can only speculate.<sup>16</sup> The validity of the argument stands thus on precarious ground. Perhaps Chrysippus would have done best to reject the Necessity-from-Necessity Rule for the necessity of the past.

#### 4.1.3 The first argument against the Stoics

The argument in *Fat.* 12 reads like a variation of the argument that proves the necessity of predicted occurrents from *Fat.* 14. It employs the same example, more or less, and comes to a comparable conclusion:

- (1) For if the conditional 'If someone was born at the rising of Sirius, he will not die at sea' is true, then the following conditional is true as well: 'If Fabius was born at the rising of Sirius, Fabius will not die at sea'.
- (2) Hence the following <propositions> are in conflict with each other, that 'Fabius was born at the rising of Sirius' and that 'Fabius will die at sea';
- (3) and since it is posited as certain in Fabius' case that he was born at the rising of Sirius, these <propositions> are also in conflict, that 'Fabius exists' and that 'Fabius will die at sea'.
- (4) Therefore the following conjunction is also formed from conflicting <propositions>: 'Both Fabius exists and Fabius will die at sea', since, as has been stated, it is not possible for it to happen.
- (5) Therefore this <proposition> 'Fabius will die at sea' is of that kind that it is not possible for it to happen.<sup>17</sup>

This argument is tortuous, and in part rather obscure. Like the second argument, it starts from the assumption that the (fictitious) divinatory theorem 'If someone has been born at the rising of Sirius, he will not die at sea' is true; it derives from this by instantiation that 'If Fabius has been born at the rising of Sirius, Fabius will not die at sea' is true as well.<sup>18</sup> The use of the name 'Fabius' in the instantiation is an addition by Cicero.<sup>19</sup>

<sup>16</sup> There is a sense in which past and future are asymmetrical, and which Chrysippus thought relevant for contingency: this is the fact that present and future human efforts can have an impact on what will occur in the future, whereas they cannot influence what has happened (Ch. 5). However, this asymmetry is not strictly concerned with immutability.

<sup>17</sup> (1) Si enim est verum, quod ita conecitur: 'si quis oriente Canicula natus est, is in mari non morietur', illud quoque verum est: 'si Fabius oriente Canicula natus est, Fabius in mari non morietur'. (2) Pugnant igitur haec inter se 'Fabium oriente Canicula natum esse' et 'Fabius in mari moriturum'; (3) et quoniam certum in Fabio ponitur 'natum esse eum Canicula oriente', haec quoque pugnant: et 'esse Fabium' et 'in mari esse moriturum.' (4) Ergo haec quoque coniunctio est ex repugnantibus: 'Et est Fabius et in mari Fabius morietur', quod, ut propositum est, ne fieri quidem potest. (5) Ergo illud 'Morietur in mari Fabius' ex eo genere est, quod fieri non potest.

<sup>18</sup> The repetition of 'Fabius' in the consequent instead of a personal pronoun is standard in Stoic logic (see Bobzien 1999b, section 1).

<sup>19</sup> So in other texts, *Div.* II 71, *Top.* III 14; whether this was just a Latin way of saying 'take anyone you want, say, Smith' or was used to refer to a specific member of that family is irrelevant here.

The next step, from the truth of the singular conditional to (2), is also valid, provided one understands the conditional as a Chrysippean conditional. For a Chrysippean conditional is true precisely if the contradictory of its consequent conflicts with its antecedent.<sup>20</sup> In (2) the truth-criterion of the singular conditional has then simply been substituted for the conditional itself. For the conditional will be true precisely if 'Fabius was born at the rising of Sirius' conflicts with 'Fabius will die at sea'.

In (3) an additional assumption is introduced: it is *certain* that Fabius was born at the rising of Sirius. It is then stated that because of this 'Fabius exists' and '<Fabius> will die at sea' are in conflict as well. This of course does not follow in any ordinary system of logic<sup>21</sup> and the reason for this turn of the argument is anything but obvious.<sup>22</sup>

The next step (4) works from the incompatibility of the two singular propositions to the impossibility of the conjunction formed from them. Here, for the first time in the argument, a modal expression is employed ('it is not possible').<sup>23</sup> It appears to have been introduced as some sort of substitute for the expression 'to conflict'. This transition can be made comprehensible if one takes the causal clause (beginning with 'since') to unfold the meaning of 'to conflict with'. For it seems that if two propositions conflict, they cannot both be true or subsist (Galen, *Inst. log.* 4.1–2).<sup>24</sup> The reasoning behind (4) can then be paraphrased as follows: if the conjuncts cannot both be true, the conjunction cannot be true, since for it to be true they must both be true. Hence the conjunction is impossible.

The last step (5) works from the impossibility of the conjunction to the impossibility of one of its conjuncts. As it stands, it seems fallacious, containing some sort of scope fallacy. With one or two illogical or at best obscure moves the opponent of the Stoics thus has reached a conclusion

<sup>20</sup> Cf. DL 7.73; *συνημμένον οὖν ἀληθές ἐστίν οὐ τὸ ἀντικείμενον τοῦ λίγοντος μάχεται τῷ ἡγγουμένῳ*. (The sentence under discussion is in fact the one on which the ascription of the criterion to Chrysippus is usually based.)

<sup>21</sup> Unless one assumes that the Stoics held that 'Fabius was born at the rising of Sirius' follows from 'Fabius exists'—but, as Long/Sedley 1987, ii. 236, rightly point out, we have no reason to believe this.

<sup>22</sup> One would expect the argument to proceed from the first pair of conflicting propositions (from step (2)) and the truth or the certainty of the first proposition, to the impossibility of the second (which, of course, is not necessarily a sound move either). This is how scholars usually take the argument: they silently skip the inexplicable steps. Cf. for instance Mueller's account of the argument, 1978, 19, and Gould 1967, 158 f., 1970, 78 f.

<sup>23</sup> 'ne . . . potest'. *Posse* functions as a modal verb (see *Fat.* 13, 17, etc.); as there is no verb \*imposse, *non posse* could also be assumed to stand for 'to be impossible'.

<sup>24</sup> The time dependency of Hellenistic propositions requires a specification of this account. I take it that the conflict is omnitemporal, i.e. that if two propositions conflict, they cannot ever both be true at the same time. The exact force of the modal expression 'cannot' in Galen's account is controversial. But certainly a proposition 'conflicts' with its contradictory and all its contraries.



parallel to that of the argument in *Fat.* 14. There the result was that it is necessary that you will not die at sea; here the outcome is that it is impossible that Fabius will die at sea.

#### 4.1.4 *The relation between the two arguments*

So far I have simply worked on the assumption that *Fat.* 12 and *Fat.* 14 present two different arguments. This is not generally understood to be so. Rather it is often taken that there was only one argument in Cicero's source (that in *Fat.* 12) and that *Fat.* 14 gives part of it, in particular that in *Fat.* 14 Cicero *restates* the argument from 12.<sup>25</sup> And indeed, Cicero does not give the impression that he deals with two separate arguments. However, the analysis of the passages certainly has made it clear that, as they stand, *Fat.* 12 and 14 are different in both content and logical structure. *Fat.* 14 supplies a transparent, logically correct, and complete inference (and is presented as such) and would make large parts of *Fat.* 12 superfluous. I hence take it for established that there were two arguments. But this does not rule out that they were part of one and the same argumentational context—which leaves us with the questions why are there two arguments, and how are they related? Two points can be made here; both are merely conjectural.

First, the two arguments may have been intended to prove two different things; for they have different conclusions. The first states that 'Fabius will die at sea' is impossible; the second that 'you will not die at sea' is necessary. (The difference in subject term is irrelevant for this point.) Or more generally, the first is concerned to prove the impossibility of something that has been predicted as false, the second the necessity of something which has been predicted as true. This fits in very well with the intermediate section *Fat.* 13, where the two cases of necessity and impossibility are treated as separate and in parallel throughout.

But this does not yet explain the seemingly unmotivated occurrence of the proposition 'Fabius exists' in *Fat.* 12. One way of explaining this would be as follows: The opponent's objective may have been to find an alternative argument to the one in *Fat.* 14, one that works independently of the necessity of propositions that state past occurrents. After all, *Fat.* 14 mentions that Cleanthes did not accept that principle; and more importantly, as we know from Epict. *Diss.* 2.19, neither did Antipater. This account finds support in the fact that the argument in *Fat.* 12 neither mentions nor presupposes the necessity of 'Fabius was born at the rising of Sirius'.

<sup>25</sup> Cf. Mueller 1978, 19: 'Cicero's restatement of essentially the same argument', and Bayer 1959, on *Fat.* 14, 'Cicero rekapituliert hier'.

In this case, a different kind of necessity would be needed. One candidate would be the necessity of propositions with a demonstrative pronoun as subject and a predicate which is synonymous with existence ( $\epsilonἶναι$ ,  $\zeta\eta\upsilon$ ). (Remember that 'Fabius' was introduced into the example by Cicero.) As to what the subject term was originally, it could well have been 'you', as in the argument in *Fat.* 14, or some demonstrative pronoun like 'this one' ( $\sigma\upsilon\delta\tau\omicron\varsigma$ ). For some Stoics, propositions which consist of a demonstrative pronoun as subject and a predicate which is synonymous with existence ( $\epsilonἶναι$ ,  $\zeta\eta\upsilon$ ) were necessary. For, they argued, they cannot be false since at the moment when the being that functions as subject term ceases to exist, these propositions are destroyed (cf. Alex. *An. pr.* 177 ff.; Philo, *Agric.* 139). The argument in *Fat.* 12 would thus have a further—implicit—premiss 'It is necessary that this one exists'.

The last step of the argument in *Fat.* 12 would then have been roughly: 'This one (Fabius) exists' and 'This one (Fabius) will die at sea' conflict. 'This one (Fabius) exists' is necessary. Therefore 'This one (Fabius) will die at sea' is impossible. (But even with this conjecture it remains dubious why 'you exist' and 'you will die at sea' should conflict, and the argument remains invalid.) In this reading, the difference between the two arguments would chiefly be that one works with the necessity of propositions correlated to past occurrents, the other with some sort of analytical necessity.

#### 4.1.5 Chrysippus' modal notions conflict with divination

We have seen above that the second argument, in *Fat.* 14, allowed us to generalize the conclusion to: 'every future occurrent that has been genuinely predicted in accordance with a divinatory theorem (whose antecedent proposition is in the past tense) is necessary'. This squares with what Cicero writes in *Fat.* 13:

But if you <Chrysippus> accept the divine predictions . . . if something is truly said about the future and it will be so, you would have to say that it is necessary.<sup>26</sup>

Or rather, it squares with this sentence, *provided* we understand the phrase 'is said about the future' in it as 'is predicted about the future'. In the first argument the generalization of the conclusion is explicitly made, a fact that I have so far neglected. Cicero moves from

(5) Therefore this <proposition> 'Fabius will die at sea' is of that kind that it is not possible for it to happen.

<sup>26</sup> At si ista comprobabis divina praedicta . . . si vere dicatur de futuro idque ita futurum sit, dicas esse necessarium.

to

(6) Omne ergo, quod falsum dicitur in futuro, id fieri non potest (*Fat.* 12).<sup>27</sup>

How should one understand, or, to start with, translate this conclusion? The argument plainly precludes anything like:

Everything that has been *falsely predicted* about the future cannot happen.

For, like the second argument, the first is grounded on the assumption that the divinatory theorems are sound and that the antecedent of the instantiation is true as well (see above 4.1.3). So instead, we have to read:

Everything that has been predicted about the future *as being false* is impossible.

This is confirmed by the fact that there is no mention of false propositions or false predictions in the whole passage *Fat.* 11–17—only of things that will not obtain or happen. In the example we have to assume that it is the proposition ‘Fabius will die at sea’ which has been predicted as being false, i.e. it has been predicted that it is not the case that Fabius will die at sea. This gives us the sense we want: it is impossible for those things to happen of which it has been predicted, by means of a divinatory theorem, that they will not happen. Hence, in both cases (necessity in *Fat.* 14 and possibility in *Fat.* 12), the predictions have to be true or genuine; only that there are two types of genuine predictions: those predicting that something about the future is true and will obtain (‘it is true that you will not die at sea’), and those predicting that something about the future is false and will not obtain (‘it is false that Fabius will die at sea’).

The upshot of the argument is thus that the Stoic acceptance of divination is a threat to that which depends on us, since all things that have been genuinely and scientifically predicted are either necessary or impossible, and consequently do not depend on us. This means, importantly, that Chrysippus’ theory is not charged with leading to universal necessitarianism. Rather it is charged with rendering impossible or necessary certain things which Chrysippus maintains to be possible and non-necessary.<sup>28</sup>

But there is a significant complication in our text: Cicero presents the whole argumentation *Fat.* 12–14 as a proof that Chrysippus, on the ground of his acceptance of divination, must accept Diodorus’ modal notions. We have seen in 3.2.1 that in antiquity it was a common objection that Chrysippus’ fate theory implies *de facto* something like Diodorean modalities. However, in the present case it looks as if this objection has been

<sup>27</sup> This point is repeated in *Fat.* 13 as ‘But if you (Chrysippus) accept the divine predictions, *et quae falsa in futuris dicentur, in iis habebis ut ea fieri non possint* . . .’

<sup>28</sup> This result is parallel to the alleged threat in the case of Diodorus’ modalities: the threat, too, was not universal necessitarianism, but the fact that certain future things turn out to be impossible (3.1.2).

brought into play rather unsuccessfully. In fact, two different lines of anti-Stoic reasoning seem to have been wrongly lumped together. This mix-up hinges upon the ambiguity of phrases such as *dici falsum* (or *vere de futuris*). This can be understood either as 'to be *predicted* as false (true) in the future', which fits in with the context of divination in *Fat.* 12 and *Fat.* 14, or as 'a false (true) *statement* about the future being made', which is required for the charge that Chrysippus *de facto* ends up with Diodorus' modal theory. Cicero's reasoning appears to exploit this ambiguity. For Cicero's reaction to the generalized conclusion (6) is to state:

(7) But this is what you want least, Chrysippus, and it is exactly what your dispute with Diodorus is about.<sup>29</sup> (*Fat.* 13)

This response makes sense only if Cicero takes the generalized conclusion as meaning

(6') Everything that is is falsely said (or said to be false) about the future is impossible.

The immediately following adduction of Diodorus' modalities corroborates this point. Thus Cicero states that Diodorus

... says that for whatever will happen it is necessary to happen, and for whatever will not happen it is impossible to happen.<sup>30</sup> (*Fat.* 13)

The first clause, stating the necessity of all future occurrents, confirms that Cicero equally understood the generalized conclusion of the second argument as concerning all future occurrents, not just those that are predicted. But Cicero would be justified in this reading of the conclusions of the two arguments only if the Stoics held that the gods send signs for everything that happens—which they did not.

So it looks as if two different strands of argumentation have been inadequately intertwined in *Fat.* 12–14. How exactly this happened is a matter for conjecture. What we can say with some certainty, however, is that Chrysippus responded to one of the arguments in *Fat.* 12 and 14, which links the necessity and impossibility of the future with divinatory theorems, and which do not charge Chrysippus with universal necessitarianism; whereas we have *no evidence* that Chrysippus responded to accusations that his fate theory or his belief in divination implies that whatever happens is necessary, and thus *de facto* leads to Diodorus' modalities.

<sup>29</sup> At hoc, Chrysippe, minime vis, maximeque tibi de hoc ipso cum Diodoro certamen est.

<sup>30</sup> ... quicquid futurum sit, id dicit fieri necesse esse, et quicquid non sit futurum, id negat fieri posse.

## 4.2 CHRYSIPPUS' REPLY: ACTIVE CAUSATION VERSUS REGULARITY OF OCCURRENTS

In *Fat.* 15–16 Cicero reports that Chrysippus replied to the argument(s) about divination and modality by rejecting the underlying basic assumption that true mantic theorems are true conditionals. We are not expressly told what philosophical reasons Chrysippus had for this response. Various suggestions have been made, each bound up with a different interpretation of the relation between causality, universal laws, and necessity—a relation which is crucial to Chrysippus' theory of fate. The passage thus deserves some attention.

### 4.2.1 *Negated conjunctions in lieu of conditionals*

To Cicero's amusement, Chrysippus wants the diviners to express their theorems not as indefinite conditionals—as they commonly did—but as negated indefinite conjunctions that are constructed from the antecedent and the negation of the consequent of the former conditional:

At this point Chrysippus gets restless and hopes that the astrologers and the other diviners can be taken in, and that they will not employ conditionals, expressing their observations thus: 'If someone was born at the rise of Sirius, that one will not die at sea', but rather will state them in this way: 'it is not the case that both someone was born at the rise of Sirius, and that one will die at sea.' What an amusing caprice!<sup>31</sup> (Cic. *Fat.* 15)

This is all we have of Chrysippus' reply to the arguments in *Fat.* 12 and 14.<sup>32</sup> It is unlikely that Chrysippus seriously intended to convince all diviners up and down the country to change the wording of their theorems. Rather, we should understand him as claiming that the *status* of genuine divinatory theorems is such that in terms of Stoic logic, if they are stated as indefinite conditionals these conditionals are false, whereas if they are expressed as the corresponding negated indefinite conjunctions they make true propositions.

<sup>31</sup> Hoc loco Chrysippus aestuans falli sperat Chaldaeos ceterosque divinos neque eos usuros esse conexionibus,\* ut ita sua percepta pronuntient: 'Si quis natus est oriente Canicula, is in mari non morietur', sed potius ita dicant: 'Non et natus est quis oriente Canicula, et is in mari morietur'. O licentiam iocularem!

\* following Madvig's *conexionibus* for *coniunctionibus*; some such emendation seems to be required; see Sharples 1991, 66, for alternatives.

<sup>32</sup> In fact, this passage provides only a reply to the argument in *Fat.* 14. Should Chrysippus have considered the argument in *Fat.* 12 valid his reply would no doubt have been similar: since the divinatory theorem is not a true conditional, it does not follow that 'Fabius was born at the rising of Sirius' and 'Fabius will die at sea' conflict; nor that the latter and 'Fabius exists' conflict.

The two types of complex propositions Chrysippus contrasts are special cases in Stoic logic. Both their names contain the specification 'indefinite'.<sup>33</sup> Indefinite atomic propositions are those that have an indefinite pronoun (instead of a definite one, or a name) as subject term, e.g. 'someone is walking'. The two types of indefinite complex proposition at issue are special insofar as they are not simply built up from two indefinite atomic propositions, but contain a cross-reference from the consequent to the antecedent or from the second conjunct to the first. Their form is not 'if someone is *G*, then someone is *F*' but 'if someone is *G*, then that one is *F*', and accordingly for the negated conjunctions.<sup>34</sup> In fact, we have here the Stoic standard formulations of two kinds of universal propositions. In the manner of quantifier logic, they could be expressed as

$\forall x$  (If *x* is *F*, then *x* is *G*)

and

$\forall x$  (It is not the case that (both *x* is *F* and it is not the case that *x* is *G*));

but for all we know, the Stoics lacked the concept of individual variables.<sup>35</sup> Why did Chrysippus demand the 'language contortions' that come with the formulation of the theorems as negated conjunctions? From *Fat.* 11–14 we know that he faced the problem that on the one hand he had to avoid the necessity of the future things predicted by the diviners and on the other he had to preserve the validity of the divinatory theorems. And since in his counter-argument he does not quibble with the logical structure of the opponent's argument from *Fat.* 14, we can assume that he regarded such arguments, i.e. arguments of the kind

<sup>33</sup> The contrast given by Cicero is *infinita conexa* and *negationes infinitarum coniunctionum* (*Fat.* 15). I have rendered this as 'negated indefinite conjunction'. But Cicero is correct: strictly speaking, the Stoics considered such propositions as *negations* of conjunctions, not as negated *conjunctions*, since the connector with the widest scope determines the *type* of the proposition. The adjective *infinitus* must render the Greek ἀόριστος, a term Chrysippus used for propositions that contain indefinite pronouns (DL 7.190; 70). For indefinite conjunctions see Plut. *Comm. not.* 1059d: τὸ γὰρ ἀόριστως συμπεπλεγμένον . . .

<sup>34</sup> The repeated mention of *indefinite* complex propositions may suggest that all instantiations in mantic theorems were supposed to have the same referent as logical subject in both clauses. However, there were divinatory rules with different logical subjects, for instance in extispicy where one encounters rules like: 'when the bile-bladder of a sacrificial animal is missing, a disaster will happen'. But note that this kind of conditional, too, is a universal statement, in this case quantified over time. This can be made explicit in formulations like: 'For all times, if at one time the bile-bladder of a sacrificial animal is missing, then at some point (soon?) after that time a disaster will happen'. I assume that the class of propositions Chrysippus is concerned with would include such cases, but not much hinges on this.

<sup>35</sup> Cf. Bobzien 1999b, section 1. on the question of indefinite propositions and quantification in Stoic logic.

If  $a$  is  $F$ , then  $a$  is  $G$ .

' $a$  is  $F$ ' is necessary.

Therefore ' $a$  is  $G$ ' is necessary.

as valid, and equally allowed the step from an indefinite conditional 'If someone is  $F$ , then that one is  $G$ ' to its instantiations, e.g. 'If  $a$  is  $F$ , then  $a$  is  $G$ '. His criticism, instead, concerned the form in which the divinatory theorems are stated or the way in which they are classified.

Chrysippus' suggestion that negated indefinite conjunctions would be an adequate way of stating mantic theorems then allows us to infer that such a connection is weak enough to avoid the consequence that the necessity of a sign of an event makes the predicted event necessary. Thus, for Chrysippus, arguments of the non-modal form

It is not the case that (both  $a$  is  $F$  and not:  $a$  is  $G$ ).

$a$  is  $F$ .

Therefore  $a$  is  $G$ .

are valid (DL 7.80; SE *PH* 2.226), and we can assume that he accepted the step from universal propositions of the kind

$\forall x$  (It is not the case that (both  $x$  is  $F$  and it is not the case that  $x$  is  $G$ ))

to its instantiations; but it seems that he did not accept arguments of the kind

It is not the case that (both  $a$  is  $F$  and not:  $a$  is  $G$ ).

' $a$  is  $F$ ' is necessary.

Therefore ' $a$  is  $G$ ' is necessary.

as valid, since he tried to evade the necessity of ' $a$  is  $G$ ' with his reply. Thus even if the first conjunct in the complex proposition is necessary, the negation of the conjunction does not allow what the conditional with necessary antecedent does, viz. to derive the necessity of ' $a$  is  $G$ '.

So far so good. But in order to understand why divinatory theorems satisfy the truth-conditions of negated conjunctions but not of conditionals, we need to know what the truth-conditions are, and what features of the divinatory theorems make them satisfy one but not the other.

First the truth-conditions: The Stoics seem to have reduced the truth-conditions of the two types of indefinite complex propositions to those of the subordinated non-indefinite propositions, i.e. all those propositions which differ from the indefinite ones only in having a singular subject term. And it appears that indefinite conditionals were considered true precisely if all their subordinated non-indefinite conditionals were true.<sup>36</sup> We may assume that analogously a negated indefinite conjunction is true if

<sup>36</sup> SE *M* 11.8–11; Cf. Bobzien 1999b, section 1.

and only if all the corresponding negated non-indefinite conjunctions are true. ('It is not the case that both someone was born at the rising of Sirius and that one will die at sea' is true (at  $t$ ), precisely if for no one is it the case that they were born at the rising of Sirius and will die at sea.)

Chrysippus' truth-criterion for a non-indefinite conditional (If  $p$ ,  $q$ ) is, as we have seen in 4.1.3, that the antecedent ( $p$ ) and the contradictory of the consequent (not- $q$ ) conflict. The corresponding negated non-indefinite conjunction (not: both  $p$  and not- $q$ ) is true precisely when it is not the case that both the first conjunct ( $p$ ) and the second conjunct (not- $q$ ) are true. The main difference between the two cases is that for Chrysippus the truth of conditionals is not truth-functional, while the truth of negated conjunctions is, since the connectives involved in the latter ('not . . .' and 'both . . . and ---') are truth-functional. (In fact, for Chrysippus all true conditionals 'If  $p$ ,  $q$ ' make true corresponding conjunctions 'not: both  $p$  and not- $q$ ', but the converse does not hold.)

#### 4.2.2 Divinatory theorems, sign-relations, and causation

What is it then that in Chrysippus' view makes divinatory theorems satisfy the truth-conditions of negated indefinite conjunctions, but not those of indefinite conditionals? The answers that have been given are many and varied, and the passage Cic. *Fat.* 15–17 remains a matter of controversy.<sup>37</sup> It comes as no surprise that once more the situation of the source material is dismal. First, we have no independent evidence about the meaning of the crucial term 'conflict' in Chrysippus' truth-criterion for the conditional; rather the present passage is often used to try and determine what it was. So here a catch-22 is looming. Second, what we know about Chrysippus' position about divination is very little, and what we know about his view on divinatory theorems, beyond the present passage, is next to nothing. There is ample record of 'the Stoic' position on divination, in the main from Cicero's *On Divination*. But the view presented there is far from uniform. Large sections go back to Posidonius' many books on divination, and a lot of this was presumably developed only after Chrysippus—and after astrology had become established in Greece and Rome. Some of the material in Cicero and from Posidonius must have its roots in Chrysippus' works—but in the case of hardly any can we be sure that *it* belonged in that category. A full and definite answer to our question should hence not be expected. This does not mean that some points cannot be settled, and some light be shed on various

<sup>37</sup> See e.g. Sambursky 1959, 78–9; Gould 1967; Donini 1973, 343 ff.; M. Frede 1974, 83–8; Mueller 1978, 20; Sorabji 1980, 267; Sedley 1982, 253–6; Sharples 1983, 170; Barnes 1985, 458; Talanga 1986, 100–2; Sharples 1991, 169–72; Ebert 1991, 37.



confusions, so that we can at least see broadly what Chrysippus had in mind in his reply.

We know the truth-conditions of negated indefinite conjunctions (see 4.2.1). They allow us to infer one first property of divinatory theorems. This is their universality. For the truth-conditions imply that for Chrysippus a divinatory theorem is genuine or valid *only if* all its instantiations come true; that is, the relation between sign and what is predicted must be universal.<sup>38</sup> (This ties in with what we learned from Chrysippus' argument from the existence of divination to the Fate Principle (Eus. *Praep. ev.* 4.3.1–2, see 2.2.3): Chrysippus held that all genuine divinatory predictions come true. If these predictions involved theorems, used in the manner suggested in Cicero *Fat.* 14, then the theorems needed to be one hundred per cent reliable.)

The universality is not undermined by the two or three passages in Cicero's *On Divination* which suggest that the Stoics believed that diviners discover their theorems by induction or conjecture based on empirical observation, and that their results are fallible (e.g. *Div.* I 24–5, 124–5). First, these passages are most probably later than Chrysippus. Second, even if Chrysippus shared this view, it does not follow from it that genuine divinatory theorems do not hold universally. For the fact that diviners occasionally declare certain universal statements to be theorems, which then lead to false predictions, does not entail that genuine mantic theorems are fallible. Rather, the error can always lie with the diviners, who either wrongly thought they had found a theorem (in which case the negated conjunctions would be false), or committed an interpretational error in their application.<sup>39</sup> If we take seriously what Chrysippus demands in Cic. *Fat.* 15, for him the theorems hold universally.

More than the universality of the divinatory theorems is not required for the truth of the corresponding indefinite conjunction. There remains the question why divinatory theorems do not satisfy the truth-conditions

<sup>38</sup> Contrary to this it has been suggested that Chrysippus requested a formulation as indefinite conjunction because the divinatory theorems are fallible in the sense that not all their instantiations are true, or in the sense that there could be false instantiations. (Sambursky 1959, 79; Sedley 1982, 252 n. 32, 254, Sedley 1984.) It is unclear whether Sedley thinks that mantic theorems are fallible in the sense that in some cases at some point there will be a false instantiation, or in the sense that there never will be a falsifying instance, but that there none the less *could* be one. If 'could' means that the connection between sign and predicted event is not necessary, this should find Chrysippus' approval. But to call this 'fallible' is perhaps a little unusual. For a compelling rejection of Sedley's suggestion that Chrysippus wanted divinatory rules formulated as plausible (*πιθανά*) conditionals see Barnes 1985.

<sup>39</sup> Cf. *Div.* I 118, quoted above 2.2.2; I 124–5; Burnyeat 1982, 235. Sedley 1982, 254 n. 38, adduces Cicero *Div.* I 24–5 and I 126 as evidence for the fallibility of divinatory rules. But none of the passages talks about rules or theorems and none can be ascribed to Chrysippus with any certainty.

of conditionals. By discussing some of the suggestions that have been made I hope to get closer to the Stoic understanding of those theorems. One passage that has been repeatedly adduced is Cic. *Fat.* 15–17. There Cicero writes:

If the Chaldaean will speak in such a way that they posit negated indefinite conjunctions rather than indefinite conditionals, why should not the physicians, the geometers, and the others be able to do the same?<sup>40</sup> (*Fat.* 15)

and then with some relish parades examples of how these would have to formulate *their* theorems. This passage has been used both to support the view that it is practitioners of any art who should formulate their theorems as negated conjunctions,<sup>41</sup> and to support the view that only the diviners need to reformulate their theorems.<sup>42</sup> As a matter of fact, about Chrysippus the whole passage tells us only that he wanted the diviners to use negated conjunctions, and the sentence just quoted implies that in that context Chrysippus did *not say anything* about the other arts. The question remains open, and we need to look for other evidence.

Thus it has been noted that divinatory theorems state sign-relations. From the definition of divination (quoted above, 2.2.1; cf. Cic. *Div.* I 25) and Cic. *Fat.* 11 we can infer that the Stoics held that divinatory theorems connect *signs* with future facts (mostly future occurrents) by establishing a relation between signs of a certain type and facts of a certain type, where the signs are prior to the facts. (I shall use 'X indicates Y' to represent a divinatory theorem neutrally.)

Signs (σημεία) had been the subject of philosophical inquiry at least since Aristotle, and Theophrastus and Zeno of Citium each wrote a book *On Signs* (περὶ σημείων, DL 5.45, 7.4); both books are lost. Of Chrysippus' view on signs we know hardly anything. We can assume that he was acquainted with Zeno's book, and that he was aware that signs were a philosophical issue.

Sextus reports parts of a detailed theory of signs which he attributes to the Stoics,<sup>43</sup> but it is uncertain how far Chrysippus' view on signs overlapped with it. This theory defines a sign as a (true) antecedent proposition in a sound conditional which is revelatory of the consequent (e.g. SE *PH* 2.104, *M* 8.245, 256). The sign-relation is thus expressed in a conditional. We obtain examples like 'If this one has a scar, he had a wound', where 'this one has a scar' is a sign that he had a wound.<sup>44</sup> There is a problem with this definition when compared with Chrysippus' reply in Cicero:

<sup>40</sup> Si Chaldaei ita loquentur ut negationes infinitarum coniunctionum potius quam infinita conexa ponant, cur idem medici, cur geometrae, cur reliqui facere non possint?

<sup>41</sup> Sambursky 1959, 78–9; M. Frede 1974, 83–8.

<sup>42</sup> Donini 1973, 343–6, 1974/5. <sup>43</sup> *PH* 2.104–6, *M* 8.245–56, 276.

<sup>44</sup> See Burnyeat 1982, especially sections III and IV, for a discussion of this theory.

the claim that the sign is an antecedent in a sound (i.e. true) conditional is incompatible with Chrysippus' statement that divinatory theorems do not make true conditionals. For formulated as conditionals the theorems precisely would have a sign as antecedent.<sup>45</sup> But this incongruity is less clear-cut than it seems. For the truth-criterion given for the conditional immediately afterwards in Sextus is that of the Hellenistic logician Philo (*PH* 2.105, cf. *PH* 2.110); and this criterion describes the same truth-function as the negated conjunction with a negated second conjunct which Chrysippus recommended for divinatory theorems. The conditional is false precisely when it begins with truth and ends in falsehood. And given that Chrysippus rejected Philo's criterion (*Cic. Acad.* II 143), and the debate was about finding the *right* account of the relation of consequence (*ἀκολουθία*), the account of 'sign' as 'antecedent in a sound conditional . . .' (since based on a concept of conditional Chrysippus rejected) can hardly have been Chrysippus'. Accordingly this theory has been argued to be pre-Chrysippean<sup>46</sup> and to be post-Chrysippean,<sup>47</sup> and one or the other it undoubtedly was.

Still, we have no reason to abandon the remainder of the definition: since it is presented as uncontested Stoic theory, it seems plausible to assume that the understanding of the sign as a proposition, rather than a corporeal thing, and as revelatory of that of which it is a sign (which needs hence to be hidden in some sense) was generally Stoic, and would have been accepted by Chrysippus. We can see how divinatory signs would fit this account. First, they serve to reveal the future—which, like the past, is hidden.<sup>48</sup> Second, based on the Stoic concept of proposition, the signs of artificial divination can be understood—in a qualified way—as propositions (*ἀξιώματα*): if signs are not taken to be objects ('the scar'), they must be something like occurrents or facts; and as such, for the Stoics, they can be understood as temporarily actualized propositions (*1.1.3*); e.g. 'this one has a scar', now, or 'Fabius is being born at the rise of the Sirius', during Fabius' birth.

The examples for sign-relations which we find in the Sextus passages on signs and in the adjacent sections on Stoic theory of proof (*ἀπόδειξις*) appear to come from sciences like medicine, from legal contexts, and from everyday observations: 'If this one is wounded in the heart, he will die', 'If this one has milk in her breasts, she is pregnant', 'If sweat flows through the surface, then there are imperceptible pores', 'If this one has a scar,

<sup>45</sup> So noted e.g. by Sorabji 1980a, 269–70, against Donini 1974/5.

<sup>46</sup> Ebert 1987, and 1991, chs. 1–3.

<sup>47</sup> M. Frede 1974, 88–9; Allen 1988, ch. 4.

<sup>48</sup> Past and future cannot be perceived, but are accessible only via reasoning, cf. *Calc. Tim.* 220, towards the end. Alternatively, divinatory signs may serve to reveal hidden past or present causal factors of the future occurrent (see below).

he has had a wound' (cf. *PH* 2.106, *M* 8. 252, 254–5, 309, cf. 153). All these sign-relations must have been considered as making true negated conjunctions, since the truth-criterion of the conditional is the Philonian. More importantly, at least some of them must have qualified also as true Chrysippean conditionals; so for instance the above-given example of the scar. (There is a conflict between someone having a scar and not having had a wound.) Thus the fact that divinatory theorems state sign-relations alone does not disqualify them from being true conditionals.

Another suggestion that has been made is that the crucial characteristic of divinatory theorems is the fact that they connect propositions about the past with propositions about the future,<sup>49</sup> or, more generally, the temporal priority of the sign to the thing signified. This characteristic was vital for the functioning of the anti-Stoic argument in *Cic. Fat.* 14. Cicero's illustrative prediction connects a proposition correlated to the—now past—sign ('Fabius *was* born . . .') with a proposition correlated to the predicted future fact ('Fabius *will* not . . .'), and Cicero inferred the present necessity of the future fact. In his reply Chrysippus intends to avoid this necessity by his requirement of reformulating the theorems.

However, again, it is unlikely that Chrysippus wanted to ban all universal relations between past and future propositions from true conditionhood. For there are also necessary relations of that kind. If one takes, for example, mortality as part of the concept of human beings, then 'if someone has been born (and is now alive), that one will die' should surely qualify as a true conditional for Chrysippus, and use of the argument scheme of *Fat.* 14 (instantiating individual living human beings) would produce necessary consequents.<sup>50</sup> A similar idea is put forward by Cicero himself in *Fat.* 17–18.

Perhaps then it is the fact that divinatory theorems state an empirical and/or causal universal relation between past and future? Thus it has been suggested that divinatory sign and what is predicted are causally related; that the divinatory theorems state empirical causal laws;<sup>51</sup> and that Chrysippus intended to exclude empirical *causal* laws generally from being formulated as conditionals, since the required conflict in the truth-criterion was logical conflict, whereas the conflict between the proposition expressing the cause and the contradictory of the proposition stating the effect is empirical. This kind of assumption suggests that there is a chain of preceding causes and effects which leads from the sign to the predicted event:

<sup>49</sup> Cf. Talanga 1986, 102.

<sup>50</sup> *Contra* M. Frede 1974, 87–8; see also 3.1.5.

<sup>51</sup> Sambursky 1959, 78–9; M. Frede 1974, 83–8. Frede changed his mind on this point in Frede 1980, 247–8 (1987, 148–9).

DIAGRAM 4.1

$$\dots \rightarrow s [\rightarrow c_1 \rightarrow c_2 \rightarrow c_3 \rightarrow c_4 \rightarrow] o \rightarrow \dots$$

with  $\rightarrow$  indicating a causal connection,  $s$  the sign,  $o$  the predicted event, and  $[ ]$  a section of the causal network that is in principle hidden to human beings. (The predicted event is only temporarily hidden.) On such an understanding the sign—*qua* indirect causal factor—contributes causally to the predicted event.

This picture is mistaken, though not completely. The reason is that in Stoic philosophy (and in Hellenistic philosophy generally), causal relations and empirical sciences fall apart. The prototypes of empirical sciences were (empirical) medicine and divination. Both aim at establishing correlations between types of signs and types of occurrents or facts, which enable them to predict what happens in the future. Both are prognostic in that sense. The correlations are established ‘empirically’ by way of observation, conjecture, and induction. Both sciences may express their results in theorems. Prognostic medical theorems typically hold for the most part only. Chrysippus would thus bar them from being formulated not only as unqualified conditionals but also as negated indefinite conjunctions.<sup>52</sup> Divination on the other hand aimed at establishing universal correlations in his view.

Such a view of the science of divination comes close to a Humean position of causality: universal correlation between occurrents, established on the basis of observation and induction. Only that for the Stoics this has nothing to do with *their* conception of causation (1.1.2, 1.3).

For, first, Stoic causes are corporeal (1.1.2), while divinatory signs are temporary actualizations of propositions, and not material entities. (Diagram 4.1 would hence have to be modified, connecting not causes and effects, but causal occurrents (1.4.2) and effects.) Second, causes actively contribute to their effect (1.1.2); mere correlation is not enough. Third, antecedent causes—as the signs would be, if they were causes—are causes of *change* (1.1.2). But, as in the case of Cicero’s example, divinatory predictions may state that something will *not* happen; that is, diviners may announce the absence of a change in the future.<sup>53</sup> (What they predict are future facts; most of them are future occurrents, but some are negative facts.) Fourth, if Chrysippus had any concept of ‘individual causal laws’, they would be laws covering ‘natural movements or reactions’ of

<sup>52</sup> What formulations would Chrysippus accept? Perhaps he would require a change of quantification for medical sign-relation ‘S indicates O’, thus: ‘For most cases: it is not the case that S and not-O’. Some medical theorems may have been thought to hold universally, see below 4.2.4.

<sup>53</sup> See also Manetti 1993, 23.

certain kinds of things, which will happen *provided nothing interferes* (1.2 and 1.3.3). These are not suitable for providing *universally valid theorems* for two reasons: (i) we cannot know all possible interfering factors, and hence whether something will cause an effect is always uncertain; (ii) the causal relations are generally very complex and not accessible in full to human beings (see below).

We have no explicit statement by Chrysippus that divinatory theorems do not state causal relations (nor that they do, of course). I have tentatively inferred this from what we know about Hellenistic empirical science on the one hand and the Stoic conception of cause on the other. I shall briefly adduce some further points that suggest that divinatory theorems state empirical, non-causal relations.

There is a passage in Cicero, *On Divination* (*Div.* I 127), which attests that some Stoics at least contrasted prediction by way of divinatory signs with 'prediction' by way of knowledge of causes:

Furthermore, since everything happens by fate . . . if there were a human being who could discern the connection of all causes with his mind, surely he would never err. For someone who grasps the causes of future things necessarily grasps what the future things will be. But as nobody can do this except god, it is left to human beings to gain their foreknowledge by means of certain signs which announce what will follow.<sup>54</sup>

We do not know how far this reflects early Stoic thought, but it comfortably fits with all we know about early Stoic theories of divination and causation.

In texts of later antiquity we witness a dispute over the relation between divinatory predictions by way of signs and the basis on which these predictions were grounded. The issue of the controversy was precisely whether the signs the diviners observed were causes or merely signs of the future events.<sup>55</sup> This is further evidence that philosophers were aware of the difference between causation and mere regularity of events in the context of divination.

Indirect evidence suggests that the Stoics were taken to be on the side of those who denied that divinatory signs are causes: we find the Stoic theory of fate, based on a network of causes, regularly contrasted with a

<sup>54</sup> Praeterea cum fato omnia fiant . . . si quis mortalis possit esse, qui conligationem causarum omnium perspiciat animo nihil eum profecto fallat. Qui enim teneat causas rerum futurarum, idem necesse est omnia teneat, quae futura sint. Quod cum nemo facere nisi deus possit, relinquendum est homini, ut signis quibusdam consequentia declarantibus futura praesentiat.

Cf. Cic. *Div.* I 12–13, 16, 23, 25, II 47.

<sup>55</sup> Cf. e.g. Tacitus, *Ann.* 6.22, Plot. *Enn.* III 1.5, II 3.1, Origen in Eus. *Praep. ev.* 6.11.54–72; SE *M* 5.4–5. See also Long 1982, 170–2.

theory of fate *qua* predetermination by the stars, as the astrologers hold.<sup>56</sup> The Stoic theory is described as a theory of 'physical', not astrological, fate.<sup>57</sup> Now it is a characteristic of the astrologers (or Chaldaeans) to maintain that the stars are causes of the predicted events. In view of the fact that the Stoic theory of fate is contrasted with this theory, this suggests that for the Stoics the stars (and presumably divinatory signs generally) were *not* causally responsible for the predicted events.

In this context a passage in Augustine seems to be of particular interest insofar as it, too, reports about language regulations which astrologers would have to make if they wanted to conform with the ideas of certain philosophers:

Now it could be said that the stars indicate those <human actions> rather than bring them about, so that their position is some kind of speech which foretells the future, and not an active power (for this has been the view of persons of no ordinary learning); but the astrologers do not usually say, for example, 'Mars in this position indicates a murderer', but 'brings about a murderer'. However, let us concede that they do not express themselves as they should, and that they ought to take from the philosophers the rule of how to formulate their predictions of what they believe they find in the position of the stars.<sup>58</sup> (Augustine, *Civ.* V 1, 191.25–34 Dombart and Kalb)

This passage implies that some thinkers—perhaps Stoics<sup>59</sup>—held that the diviners wrongly formulated predictions as if they gave causal connections: correctly, they should use instead of *facere* (to bring about, to effect) which suggests a causal relation, *significare* (to indicate) which does not do so. That is, here, too, the diviners are thought to use expressions that suggest a stronger relation between sign and predicted event than there actually is. This is certainly reminiscent of Chrysippus' point in *Cic. Fat.* 15; but this time the stricter relation is clearly determined as causal, the weaker as non-causal.

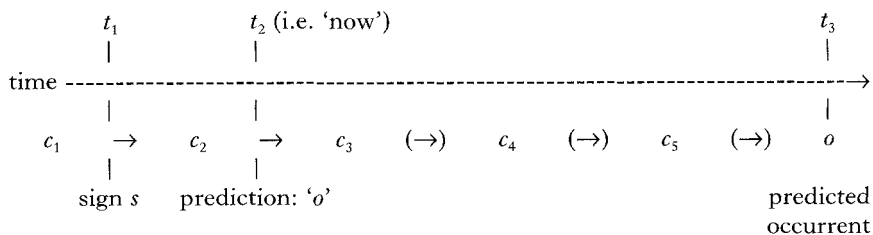
Taking all these points together, I hence assume that for the Stoics, divinatory theorems do not connect causes with effects, nor state any causal relations in a wider sense. They connect signs (i.e. actualizations of propositions) with future facts. The relation is a sign-relation that is

<sup>56</sup> Augustine, *Civ.* V 8, *Nem. Nat. hom.* 104–5, cf. also Tacitus, *Ann.* 6.22 and *Cic. Div.* I 126.

<sup>57</sup> *Cic. Div.* I 126, *physice*.

<sup>58</sup> Quod si dicuntur stellae significare potius ista quam facere, ut quasi locutio quaedam sit illa positio praedicens futura, non agens (non enim mediocriter doctorum hominum fuit ista sententia) non quidem ita solent loqui mathematici, ut verbi gratia dicant: 'Mars ita positus homicidam significat' sed 'homicidam facit'; verumtamen ut concedamus non eos ut debent loqui et a philosophis accipere oportere sermonis regulam ad ea praenuntianda, quae in siderum positione reperire se putant.

<sup>59</sup> Augustine discusses a lot of Stoic theory in book V, and he favourably contrasts the Stoic view of 'physical fate' with the theory of astrological fate, see *Civ.* V 8.



(with ' $x \rightarrow y$ ' standing for ' $x$  is a causal occurrent of  $y$ ')

DIAGRAM 4.2

universal, empirical and scientific (based on observation and induction), and prognostic. The way the divinatory theorems operate can then be described and illustrated as in Diagram 4.2 (I use Cicero's example, in default of anything more authentically Stoic).

Assume that at the time  $t_1$  Fabius is born and Sirius is rising; that at the time  $t_2$  a diviner genuinely predicts 'Fabius will not die at sea', and that it is now  $t_2$ . 'Fabius is being born and Sirius is rising' is the (conjunctive) sign,<sup>60</sup> 'Fabius will not die at sea' is that which is revealed by the sign.<sup>61</sup> Now, at  $t_2$ , the diviner uses a proposition about the past correlated to the sign, which, since correlated to a past occurrent, is true and necessary. That which is revealed is also true *now*, according to Chrysippus' understanding of divination (cf. 2.2.3). The sign and that which is revealed have been connected by the diviner on the basis of the genuine divinatory theorem "Someone is born at the rising of Sirius" indicates "that one will not die at sea" (using the neutral formulation introduced earlier). Fabius' mortality assumed, it follows that, at some future time, say  $t_3$ , Fabius will die, and at that time he will not be at sea. The theorem has been obtained by way of long-term empirical observation of many cases of births at the rising of Sirius, followed by death at some place other than the sea. The reason why the diviners could detect this theorem is that the divine power that governs the universe has arranged the world in such a way that births at the rising of Sirius are

<sup>60</sup> More precisely, 'Fabius is being born and Sirius is rising', *while it is true or actualized*, is the sign; at the time of the prediction, that sign is not there any more, the proposition has turned false, Fabius' birth is over. The diviner uses the correlated proposition about the past (cf. 1.1.3), which could of course be considered as a sign, derivative of the original one.

<sup>61</sup> I have treated this as the prediction of the *occurrent* 'Fabius dies at some place other than the sea'. Given that the example is most likely made up by Cicero, in any case it does not tell us anything about Chrysippus' view of what it is that is predicted. If what is predicted is the future fact that something or someone does *not* change or is *not* in a certain state, there would be an occurrent that is caused and that entails this fact. (For example, the fact that Fabius does not die at sea would be entailed by the occurrent that Fabius died on land, which in turn was caused.)



*universally* followed by deaths at places other than the sea. (If you find this is hard to believe, remember that I have used *Cicero's* example, and that theorems often were vaguer and more general, leaving space for interpretation of the sign.)<sup>62</sup> There is a regular pattern of divinatory sign and that which is revealed by it. But the sign is not part of the causal history that is responsible for the predicted future occurrent (or if it should be, this is not essential for its being a sign).<sup>63</sup>

Even if a divinatory sign is not causally relevant to a predicted occurrent, there are still two very different ways in which it can be connected with this occurrent: either it is connected in some specific way to its causal history, or it is incidental to its causal history.

The first possibility is best conceived of in analogy with symptoms in medicine. Medical theorems often connect symptoms of future occurrents with those future occurrents, or symptoms of the causes of future occurrents with those future occurrents. (Hydrophobia may be a symptom of rabies, rabies the cause of death; death-rattle may be a symptom of death.) In both cases, the usual assumption is that there is at the present or in the past a hidden causal factor (e.g. 'the disease') of the predicted occurrent, which is causally relevant for the occurrent, and that the symptom is a 'side-effect' of this causal factor. Thus there is an assumed common causal source of both the sign or symptom and the predicted occurrent, and in the various instantiations of the theorem there will be a causal history that is comparable in all relevant respects. The connection between present symptom and future occurrent is thus not arbitrary. Cicero suggests that some Stoics had such a view of divination:

This is clear . . . also to those <diviners> to whom the course of things is known by way of observation. Even though they do not discern the causes themselves, they none the less discern the signs and tokens of these causes.<sup>64</sup> (*Div.* I 127)

Divine benevolence would manifest itself in this case in the design of the causal factors of certain types of occurrents in such a way that the occurrents have certain observable side-effects. If Chrysippus held this view (something we do not know), he would also have to hold that the symptoms of that type of future occurrent are present *only if* there will be a future occurrent of that type, since this is the only way of warranting the universality of the relation between sign and future occurrent.

<sup>62</sup> Cf. e.g. Manetti 1993, 19–23.

<sup>63</sup> That someone's *knowledge* of a future occurrent could be a relevant causal factor of the subpart of the causal nexus which actively brings that occurrent about is a different matter. For this special situation which the Stoics did in fact discuss, see Alex. *Fat.* ch. 31 and below, 4.2.5.

<sup>64</sup> Quod et ii vident . . . quibus cursus rerum observando notatus est. Qui etsi causas ipsas non cernunt, signa tamen causarum et notas cernunt.

Alternatively, the sign could be incidental to the causal history, though not arbitrary altogether, but ultimately wangled by the divine power. Such relations may have been assumed in the case of medical theorems, at the very beginning of the science.<sup>65</sup> What in the case of divination makes the arbitrariness to the causal history plausible is the fact that divinatory theorems often connect two occurrents of certain types, instantiations of which seem to have very little in common in their causal history beyond the correspondence of sign and revealed occurrent. Fabius' life may have nothing noticeable in common with, say, Septimus' life, except that both were born at the rising of Sirius and neither will die at sea. Generally one can imagine that significantly different types of (Stoic) causal chains lead to different instances of the same type of occurrent, which were predicted with the help of signs of the same type, and the same theorem. In this case the connection between birth at the rising of Sirius and death not at sea would be *arbitrary* in the sense that the sign is neither a causal factor nor a side-effect of a causal factor in the causal (sub-)nexus that actively works towards the predicted occurrent.

Presumably, the 'logistics' a divine power would have to master would be comparably complex, whether the task is to create between cracks in ox-livers and military disasters a non-causal universal correlation, a causal connection, or a common causal factor. We cannot rule out that some Stoics assumed some mysterious decisive causal factor of which both the crack in the liver and the misfortune of the ruler are effects, and Posidonius may have maintained such a thing.<sup>66</sup> My own inclination is to believe that for Chrysippus observable correlations are entirely courtesy of the gods.<sup>67</sup> But in any event, as we have seen, everything points to the result that the signs themselves are not causally relevant to the predicted occurrent.

This is not to deny that a crack in the liver, or birds flying in a certain pattern were not in some way part of the causal nexus of the world which makes up fate as a whole. If the sign proposition states a movement or change—as in the case of the birds, flying in a certain pattern, these birds, flying in that pattern, will have some causal influence on the world. And since according to the Stoic theory of *sympathy* in some sense everything in the universe emits some physical influence on everything else,<sup>68</sup> (if it

<sup>65</sup> Manetti 1993, 36–40.

<sup>66</sup> Cic. *Div.* I 130 produces a meteorological example of this kind which seems to go back to Posidonius.

<sup>67</sup> Cic. *Div.* II 35 mentions two ways in which Chrysippus, Antipater, and Posidonius believed this could happen: (i) the selection of the sacrificial animal is guided by the all-pervading divine power; (ii) in accordance with the divine will, at the very moment of the sacrifice the entrails of the sacrificial animal change.

<sup>68</sup> For Chrysippus and the theory of sympathy in the context of fate see Cic. *Fat.* 8 (as far as I can see this is the only passage which clearly connects Chrysippus with a 'theory of sympathy') and below 6.3.6.

does not happen to be cancelled out by something else) these birds may have a minute influence on the state of the objects which are involved in the predicted occurrent. But the fact that there may be such an impact does not imply in any way that the birds are *causally relevant for the predicted occurrent*.<sup>69</sup>

Have we come any closer to answer the question what it is that makes divinatory theorems not satisfy Chrysippus' truth-criterion for conditionals and consequently, why inferences of the kind

The divinatory sign 'Fabius was born at the rising of Sirius' indicates 'Fabius will not die at sea'.

'Fabius was born at the rising of Sirius' is necessary.

Therefore 'Fabius will not die at sea' is necessary.

(with an instantiation of a divinatory theorem as first premiss) were regarded as invalid by Chrysippus? The picture emerging is that for Chrysippus artificial divination as a scientific discipline has a special status in that the relations stated by its theorems are sign-relations, connect the past with the future, are empirically obtained and typically non-causal, but still hold universally.<sup>70</sup> The fact that signs are causally coincidental to the predicted occurrents (and perhaps to their causal history) may explain why the relation between divinatory sign and predicted occurrent does not satisfy the truth-conditions. There is no conflict, conceptual or causal, between the sign and the contradictory of the proposition correlated to the predicted occurrent. Equally, the causal irrelevance may be a reason why the necessity of the sign cannot be 'transferred' to the occurrent. There is no connection between sign and occurrent, conceptual or causal, via which the necessity could 'travel'. Universal regularity in itself is not sufficient for the conflict required in the truth-conditions. This regularity is based on divine benevolence, not on some 'causal law'. Divinatory theorems thus—in principle—allow us to *know* the future without themselves necessitating the future. (Of course, additionally, we would need a criterion to ascertain when a diviner makes a mistake—something the Stoics do not provide.)

#### 4.2.3 *A modification of the anti-Stoic objection*

But, one may object, is all this not simply a cop-out on Chrysippus' part? For Chrysippus himself maintains that divination presupposes a continuous causal nexus (see 2.2). So if there are causes of the predicted future

<sup>69</sup> For a more detailed discussion of this general point cf. 5.3.2.

<sup>70</sup> Among prognostic empirical disciplines, universal regularity seems to be almost exclusive to divination. There may be the occasional prognostic medical theorem which holds universally; but it would most certainly link causes with effects, see 4.2.4.

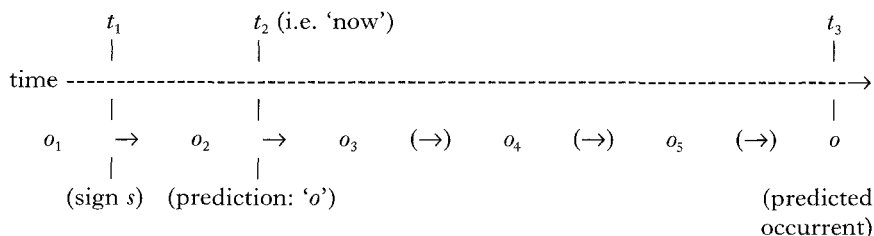
occurrent now and have been before now, then the future occurrent is surely thereby necessitated by the past.

An objection of this kind may have been what Cicero had in mind in *Fat.* 14, where he suddenly introduces natural causes into the debate. After the presentation of the second anti-Stoic argument (*Fat.* 14) he adds 'But still, if there is a natural cause why Fabius should not die at sea, then it is not possible for Fabius to die at sea.'<sup>71</sup> This remark appears to have been added to back up the arguments against the Stoics. But in the context it seems strangely unfitting: First, the statement refers actually to the first of the two arguments (*Fat.* 12) not to the second (*Fat.* 14); for it is about Fabius and impossibility, not about 'you' and necessity (cf. 4.1.4). Then, causes do not otherwise occur at all in the whole passage, including Chrysippus' reply. The arguments do not claim that there is a *cause* for Fabius' not dying at sea but that it is *predicted*. With 'natural cause' (*naturalis causa*) Cicero usually refers to Stoic *fate*, and fate itself is not at stake in the present argument either. I thus take it that this remark was added to the debate later, perhaps by Cicero, since it so clearly does not fit the context and interrupts the coherence in *Fat.* 14–15.<sup>72</sup>

Nevertheless, does Cicero not have a point? One can easily draw up an argument based on his objection, which is analogous to that in *Fat.* 14, and which is designed to prove the necessity of the predicted occurrents by replacing the sign-relations by causal relations. To illustrate this, we can recycle Diagram 4.2, focusing this time on the causal background of the future occurrent; we thus obtain Diagram 4.3.

<sup>71</sup> Sed tamen, si naturalis est causa, cur in mari Fabius non moriatur, in mari Fabius mori non potest. (Cf. also Donini 1973, 340–3, on this sentence.)

<sup>72</sup> The original course of the debate of the whole passage *Fat.* 11–17 is uncertain. We can identify a sequence: argument by an opponent (parts of *Fat.* 14, perhaps *Fat.* 12), reply by Chrysippus (*Fat.* 15), counter by an opponent (*Fat.* 15–17); but I surmise that the history of this discussion is more complex. One opponent was intimately acquainted with Stoic logic: with Chrysippus' and Diodorus' modal notions; with the Necessity-from-Necessity Rule (as held by Chrysippus but not by Cleanthes), and with Chrysippus' restriction of its validity; with Chrysippus' truth-criterion of the conditional (*Fat.* 12–15). In contrast, the opponent of *Fat.* 15–17 basically only pours scorn on Chrysippus' reply. He misrepresents Chrysippus' point, seems unaware of its logical significance, or deliberately passes it over. This makes it unlikely that the two opponents are the same person. There is further the discrepancy between (i) the two arguments and Chrysippus' counter, all concerned with divinatory prediction; and (ii) the criticism that Chrysippus lapses into Diodorean modalities, concerned with future propositions in general (4.1.5). One possible reconstruction of the course of the debate would then be this: one of Chrysippus' writings contained an anti-Stoic argument, based on the Stoic acceptance of divinatory theorems (part of *Fat.* 14) and Chrysippus' reply to it (part of *Fat.* 15); a later critic (Carneades?) took this over from Chrysippus, introduced, maybe, the variant of the argument we find in *Fat.* 12, and connected the argument(s) with the debate over modalities and the objection that Chrysippus relapses into Diodorean modalities. Cicero drew from this source, and perhaps added the remark on natural causes in *Fat.* 14 and the criticism of Chrysippus' reply in *Fat.* 15–17 himself.



(with ' $x \rightarrow y$ ' standing for ' $x$  is a causal occurrent of  $y$ ')

DIAGRAM 4.3

The reasoning would run like this: the propositions about the past that are correlated to  $o_1$ ,  $o_2$ , and  $o_3$  are true and necessary, since they are correlated to past occurrents. Since the proposition correlated to  $o_3$  is true and necessary, if there were some universal causal law ' $O_3 \rightarrow O_4$ ' such that an occurrent of type  $O_3$  always brings about an occurrent of type  $O_4$ , the proposition about the future correlated to  $o_4$  would become necessary as well, derived by way of the Necessity-from-Necessity Rule. But then, does not the proposition correlated to  $o_4$  (since it is necessary) also make necessary the proposition correlated to  $o_5$  by way of a causal law ' $O_4 \rightarrow O_5$ '? And would not equally the proposition correlated to  $o_5$  (which is then necessary) make that correlated to  $o$  necessary by way of a causal law ' $O_5 \rightarrow O$ ', etc.? In this way, every proposition correlated to a future occurrent would still end up as being necessary now—regardless of what Chrysippus says about the status of divinatory theorems.

The general train of thought of this argument is familiar from modern theories of causal determinism and seems to have some force as an argument against compatibilists who assert a continuous nexus of causes for all occurrents. But as an objection to Chrysippus' statement about the status of divinatory theorems in reply to the arguments in *Fat.* 12 and 14, this reasoning fails, since for those arguments it is irrelevant. It does not prove Chrysippus' rebuttal of the argument in *Fat.* 14 wrong. The predicted occurrent, even if it were necessary, would not be so because of the sign. It is not necessitated by the sign. Hence there is no threat of determinism, i.e. of the destruction of the contingent, through divination. Chrysippus succeeded in refuting the argument presented to him.

What if we disregard the context in *Fat.* 11–17, and simply ask: would this kind of argument—as hinted at by Cicero—force Chrysippus to accept that all future occurrents are necessary? It seems that this would at least bring Chrysippus on to difficult terrain, given that he accepted the Necessity-from-Necessity Rule and maintained the necessity of true propositions that state past occurrents. Divinatory predictions, it is true, are typically of the kind where the causes are hidden (see 4.2.4), and generally the Stoics thought of the causal nexus as too complex to be fully

known by human beings (see above). So the necessity of this future could not be demonstrated empirically in most cases, and certainly not in those cases which involve human decision-making. But, we could say, the point is not whether an empirical proof is possible.

Another obstacle for such arguments to affect Chrysippus' position is that they presuppose a concept of 'laws of nature' we have no evidence Hellenistic philosophers had: a large number of individual causal laws, each covering particular cause-effect relations (5.3.2). In Stoic physics there may be no sound conditional of the above kind ' $O_x \rightarrow O_y$ ' short of one that describes an entire past state of the world in its antecedent; and Stoic continuum theory would presumably make it difficult even to individuate such a world-state. Fate is not conceived of as a chain of world-states, but as an interconnected network of causes.

Still, if we confront Chrysippus with whole world-state antecedents, would he not have to admit the necessity of all future occurrents? This depends on what his claim of the necessity of propositions correlated to past occurrents is based on. If his only reason for this necessity was the fact that the past is settled, Chrysippus' best move would have been not to call such propositions about the past necessary (for the future is just as settled in his view, cf. 2.1.1.5, 4.1.2). This is what Cleanthes and Antipater did, and it would solve the whole problem neatly and painlessly—especially since we know that Chrysippus made a distinction between fate and necessity (3.4). Matters would be different, if Chrysippus believed that the past is necessary because whatever anyone may do now does not affect past occurrents—whereas it may be relevant for what happens in the future (cf. 4.1.2 and Chapters 5 and 6). In this case Chrysippus' best strategy would be to deny truth to all those complex conditionals which involve human action between the past state of the world in the antecedent and the future occurrent in the consequent. Or, if the necessity of true propositions stating past occurrents was specific to the *past*, he should have rejected the Necessity-from-Necessity Rule for this kind of necessity. But here we have long left the street of sober scholarship, and followed the unmarked path of conjecture.

#### 4.2.4 Divination, determinism, and human action

Chrysippus' counter-argumentation in Cic. *Fat.* 15 can then be counted as successful in blocking the opponent's argument from *Fat.* 14: what is genuinely predicted by diviners is not necessitated through the prediction, because the relation between sign and predicted future occurrent does not 'transmit' necessity. Universal regularity between sign and predicted occurrent does not suffice to make a future occurrent necessary.

Some reminder may be in place that this is not a minor side result in the debate about fate, but—in antiquity—touches the very centre of the

problem of determinism, prediction, and that which depends on us. The theorems of the diviners under discussion serve to predict the future—but not just any kind of future occurrent. They generally help to foretell things that concern what will happen to human beings—to individuals, or groups of people, up to whole states. It is human fate for which the gods send signs to the diviners, and they do so because they are benevolent.

But does not ancient medicine, with its emphasis on prognosis, too, aim at predicting the destiny of individual human beings? This is true. However, there are differences. First, medical theorems were believed to generally hold only for the most part and not universally (4.2.2), and in such cases the argument scheme from *Fat.* 14 could not be applied to prove future necessity. Second, in those few cases where the Stoics may have assumed a universal connection, this connection would most certainly link causes and effects. Cause and effect would be spatio-temporally connected. For instance, the ancients seem to have believed that a wound in a person's heart universally indicates that person's more or less imminent death (SE *M* 5.104, 8.153, 254–5, Quint. *Inst. orat.* 5.9.5), and also that it is a necessitating causal factor of that death (Quint. *ibid.*). But a medical theorem of the kind 'if someone has suffered a wound in their heart, they will die (soon)' would presumably not be seen as a threat to the existence of contingency. Rather, we would be inclined to accept that in these cases the future death is indeed necessary, although perhaps not so from past eternity, but e.g. from the time on when the wound was received. Prediction of a patient's death by a physician, and the claim of its necessity by arguments along the lines of *Fat.* 12–14 would hence presumably not have been regarded as a threat to the things that depend on us (*Fat.* 11).

The diviners on the other hand connect in their theorems the future destiny of a person with past or present occurrents that are not only external to that person, but also seemingly causally unrelated.<sup>73</sup> Moreover, between a prediction of a person's destiny on the basis of divinatory signs and the predicted occurrent there usually arise a considerable number of situations in which the person deliberates, makes decisions, performs actions.<sup>74</sup> Among these are often decisions which—in normal circumstances—are regarded as germane to whether the prediction will come true. (Fabius may decide to spend his life as a sailor or pirate and never to go ashore.)

In *On Divination* I 9 and II 13–26 Cicero reports that the Stoics specified the class of occurrents which forms the target of prediction by divination as those which happen by chance (*res fortuitae*). There is no

<sup>73</sup> A consequence of this is the lack of explanatory value of the theorems. The mere fact that a sign of type *S* is regularly followed by an occurrent of type *O* does not help us to understand the occurrent *o* at all.

<sup>74</sup> For a discussion of the Stoic view of intra-psychical processes related to decision-making cf. 6.1–3.

evidence that this is early Stoic. The context rather suggests Posidonian origin. Still, the point made illuminates the specific status of divination, as compared with the other sciences. For the Stoics chance occurrents are those of which we do not know, and perhaps cannot know, the causes (Cf. Stob. *Ecl.* I 92.14–15, and above, 1.3.2). Paramount among the future occurrents of which we do not know the causes are those which are temporally remote and which involve human decision-making in the period of time which lies between now and when they happen. Although it is perhaps not impossible that in the aftermath one finds a subsection of the causal network which helps to explain what happened, it seems that the impossibility of detecting all causes is a fundamental point. The occurrents the diviners predict are among those which are considered as ‘unpredictable’ by way of causal connections, because they involve too many possible influences, including human decisions and actions, and do not follow a regular pattern we could understand.

Would the charge of necessitation of future occurrents by genuine divinatory theorems then be comparable to that levelled against modern determinists who propose the possibility of predicting human behaviour, based on neurophysiological ‘laws of nature’? Was divination considered a threat similar to the bogeyman neurophysiologist in modern discussions of determinism who could in principle predict whatever we do? After all, both are based on the idea of universal regularities that hold in the realm of human life. Still, the answer must be in the negative. For the Hellenistic view of divination was that divinatory theorems only cover isolated occurrents. The gods do not give signs for all things that happen to human beings, but only for very few. Moreover, divination does not usually foretell human behaviour, but something that happens to human beings rather than what they do. The idea that one could predict everything a person will do and suffer is alien to the ancient conception of divination.

This view of the prediction only of isolated occurrents, however, opened the door for certain other anti-fatalist arguments. If divination forecasts what happens to someone, regardless of what that person does, then, whether or not the future occurrent is necessary, as long as it is settled (which Chrysippus admits), will it then not be pointless to perform any actions that are usually considered as bringing about or preventing the predicted occurrent? This question, on a larger scale, connecting human intention and action with a settled future, makes up another complex of philosophical difficulties with which compatibilist determinists like the Stoics were confronted. These are the topic of the next chapter.

#### 4.2.5 Appendix: Conditional Predictions

So far I have considered only divinatory signs that indicate future occurrents without themselves being (necessarily) causally involved in bringing



these occurrents about. There was, however, in antiquity another kind of divinatory sign, which even the Stoics considered to be causally relevant to what happens in the future. These are divinatory predictions, mostly prophecies, which are at least covertly of conditional form. They do not predict the future categorically, but make what will happen contingent upon a future action, usually of the addressee of the prophecy. Typical forms are

Don't  $\phi$ , otherwise  $p$  (where  $\phi$ -ing is an action and  $p$  is undesirable to the agent)

or

If you  $\phi$ , then  $p$  (where  $p$  is undesirable to the agent)

or

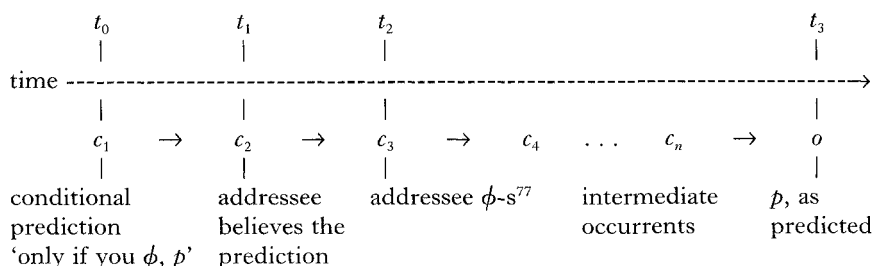
Only if you  $\phi$ ,  $p$  (where  $p$  is desirable to the agent).

Conditional predictions crucially differ from divinatory theorems in that (i) they are signs,<sup>75</sup> (ii) they are not universal, but address a particular individual (or a group of individuals), and (iii) their antecedent concerns a *future action* of the addressee of the prediction. The causal influence of such signs would in the ordinary case be based on the facts that the addressee of the prediction (i) believes in its correctness, and consequently (ii) embarks on a course of action they otherwise would not have followed. That is, for instance, in the actual world, at  $t_0$  the prediction 'only if you  $\phi$ ,  $p$ ' ('only if you sacrifice your daughter will the war come to a halt') is given to a person who regards  $p$  as desirable; at  $t_1$  the person assents to, and starts believing in the prediction; at  $t_2$  the person then  $\phi$ -s, and at  $t_3$   $p$  becomes true. In a possible world without the prediction, no prediction is given at  $t_0$ ; consequently, no prediction is assented to at  $t_1$ , the agent does not  $\phi$  at  $t_2$  (or any time after  $t_1$ ), and  $p$  does not become true at  $t_3$  (or any time after  $t_1$ ).

We can assume that the Stoics incorporated conditional predictions within their causal determinism without giving up the ideas that actions are in the agent's control, and that the prophetic advice can hence—in some sense—be useful. In our example, they would hold that the prediction at  $t_0$ , the agent's belief in it at  $t_1$ , the action at  $t_2$ , and the result at  $t_3$  are all fated. At the same time, the action is in the agent's control, since at  $t_2$  it is possible for the agent to  $\phi$  and not to  $\phi$ , and the agent is not forced either way.<sup>76</sup> The causal sub-network can be depicted as follows:

<sup>75</sup> We can infer from Cic. *Div.* II 130 that the Stoics considered these predictions (or more precisely the giving of them) as signs. But they are signs only of 'what will obtain if something else obtains', i.e. they are *conditional* signs.

<sup>76</sup> This is at least stated in the—presumably Stoic—discussion in Orig. *Cels.* II 20, 340.51–342.60 (Borret) of the conditional prophecy given to Laius—for which see below. (For the integration of actions in the causal network see 5.3, and for the relation between modalities and responsible agency see 3.1.5 and 6.3.7.)



(with ' $x \rightarrow y$ ' standing for ' $x$  is a causal occurrent of  $y$ ')

DIAGRAM 4.4

We have no Stoic examples of this kind of causal embeddedness of conditional predictions. But there is a passage in Alexander's *On Fate* in which the oracle given to Laius by Apollo is used by some determinists, most probably Stoics, to show how a conditional prediction functions as a causally necessary condition for a—fated—future occurrent. Only that in this case the agent did not satisfy the antecedent of the prediction, and consequently the oracle has a causal influence with a twist:

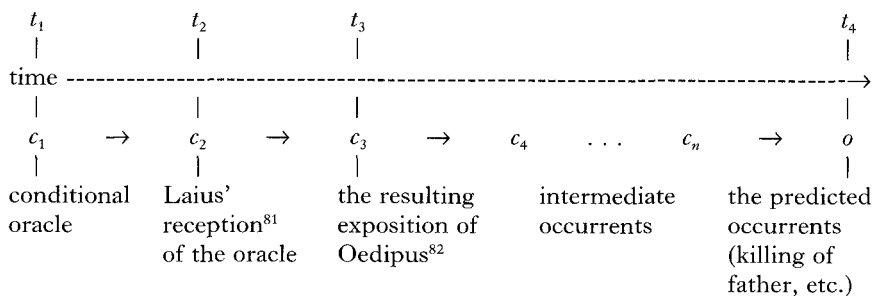
And when one adduces [against the proponents of the Fate Principle]<sup>78</sup> the oracle that was given to Laius, by which the Delphian Apollo tells him about the fact that he must not father children, 'for if you beget a child, the one begotten will kill you, and all your house will wade through blood', then, as their writings announce, they do not respond by saying that Apollo prophesied in this way since he did not know that Laius would not obey (for he knew this very well), but since, if he had not prophesied such a thing, then none of the things which happened in the tragic reversal concerning Laius and Oedipus would have happened. (*It follows the whole story of Oedipus.*) Now, in order for all these things to be preserved and the drama of fate to be fulfilled, through the oracle the god gave Laius the impression<sup>79</sup> that he could avoid what was said. And when Laius, in a state of drunkenness, had fathered a child, he exposed the child when it was born, and this exposure became the cause of the unholy stories.<sup>80</sup> (Alex. *Fat.* 202.8–15, 21–5)

<sup>77</sup> Here the agent in fact comes in as a co-cause by way of assenting to the impression that they should  $\phi$ ; see 6.3.1–5, and in particular 6.3.4.1. The agent's responsibility for what happens is based on this fact.

<sup>78</sup> Cf. Alex. *Fat.* 201.32–202.8.

<sup>79</sup> Cf. 6.3.4.1 for the gods giving impressions (*φαντασίαι*) of falsehoods to human beings.

<sup>80</sup> Καὶ δὴ καὶ τὸν τῷ Λαῖῳ δοθέντα χρησμὸν παρεχομένων, δι' οὗ λέγει πρὸς αὐτὸν ὁ Πύθιος περὶ τοῦ μὴ δεῖν παιδοποιεῖσθαι "εἰ γὰρ φυτεύσεις παῖδα, ἀποκτενεῖ σ' ὁ φύς, καὶ πᾶς σὸς οἶκος βήσεται δι' αἵματος" <οὐ>\* φασιν, ὡς κηρύττει τὰ συγγράμματα αὐτῶν, οὕτως αὐτὸν χρῆσαι ὡς οὐκ εἰδὸτα ὅτι μὴ πεισθήσεται (παντὸς γὰρ μάλλον ἤδει), ἀλλ' ὅτι μηδὲν μὲν αὐτοῦ τοιοῦτον χρήσαντος οὐδὲν ἐμελλεν τῶν κατὰ τὴν περιπέτειαν τὴν



(with ' $x \rightarrow y$ ' standing for ' $x$  is a causal occurrent of  $y$ ')

DIAGRAM 4.5

The passage does not allow us to recover the precise problem the proponents of the Fate Principle discussed 'in their writings'. Still, it appears that they produced a determinist response to the question why the gods, who know the future, still give conditional prophecies. In particular, the question seems to have been why the gods bother to give advice, if—as in the case of Laius—they are aware of the fact that it will be ignored.<sup>83</sup> The determinist reply is that the gods give conditional prophecies since these are causally necessary conditions of certain (fated) future occurrents. The conditional prediction itself is understood as part of the causal network of fate, and—via the acknowledgment of the prediction by its addressee—it warrants certain future occurrents which, too, are part of the same causal network, and of the same rationally predetermined course of the world (cf. Diagram 4.5).

περὶ τὸν Λαίον τε καὶ τὸν Οἰδίπουν γενομένων γίνεσθαι. . . . Ὅπως οἶν πάντα ταῦτα σωθῇ καὶ πληρωθῇ τὸ τῆς εἰμαρμένης δράμα, φαντασίαν ὁ θεὸς διὰ τοῦ χρησμοῦ τῷ Λαίῳ παρέσχεν ὡς δυνάμειν φυλάξασθαι τὰ λεγόμενα, καὶ ἐπεὶ μεθύσθεις ἐπαυδοποιήσατο, ἐξέθηκεν τὸ γερόμενον παιδίον ὡς διαφθερῶν, ἥτις ἔκθεσις αἰτία τῶν ἀνοσίων μύθων ἐγένετο.

\* add. Bruns; it is uncertain whether the determinists in their writings actually *denied* that Apollo prophesied because of his ignorance of the future, or only *stated* that he knew the future.

<sup>81</sup> One may doubt whether Laius believed the prediction in a straightforward sense. Presumably, when inebriated, he temporarily gave up the belief, and afterwards it included at the very least the hope that certain actions may avert the realization of its consequent. Naturally, this hope was in vain, as Chrysippus, too, pointed out; see n. 84 following.

<sup>82</sup> Again, at this point the agent in fact comes in as a co-cause.

<sup>83</sup> This is also the problem alluded to in Epict. *Diss.* 3.1.16–18, which further supports the assumption of Stoic origin of the Alexander passage.

Here—unlike in the cases discussed above in 4.2.2—the divinatory sign (i.e. the conditional prophecy) is part of the causal sub-network that is causally relevant to the predicted occurments; however, it does not indicate unconditionally what is going to happen.<sup>84</sup>

<sup>84</sup> A short passage from Diogenianus in Eusebius *Praep. ev.* 4.3.12 suggests that Chrysippus made use of the same example as Alexander and Epictetus: 'Even Chrysippus himself says that the parents of Oedipus and of Paris contrived many things so that Oedipus and Alexander (i.e. Paris), the son of Priamus, would die, in order to avoid the evil that was predicted to happen to them from these, but that they were unable to avoid it.' (Τὸν γοῦν Οἰδίποδα καὶ τὸν Ἀλέξανδρον τὸν τοῦ Πριάμου καὶ αὐτὸς ὁ Χρύσιππος φησιν πολλὰ μηχανησαμένων τῶν γονέων ὥστε ἀποκτεῖναι, ἵνα τὸ ἀπ' αὐτῶν προρρηθὲν αὐτοῖς κακὸν φυλάσσωνται, μὴ δυνηθῆναι.) However, it is unlikely that the conditional character of the Laius oracle was at issue, since—as far as we know—in the case of Paris, Hecuba's dream was not of conditional form. Chrysippus may have used these examples simply to illustrate that whatever is fated is inevitable, basing this on his claim that what is truly predicted must be fated; see *Praep. ev.* 4.3.1–2 and above 2.2. In any event, the passage implies that the point at issue was Laius' vain attempts to avoid his fate *after* he had disobeyed Apollo. (I assume that the next sentence, *Praep. ev.* 4.3.13, which suggests that Chrysippus regarded predictions as useless, is Diogenianus' polemical (mis-) interpretation of Chrysippus.) For the mention of Laius and Oedipus in Cic. *Fat.* 30 see below 5.2.1 and 5.2.3.2.

## Fate, Action, and Motivation: the Idle Argument

A main criticism of fatalist theories of all kinds has always been the objection that if something is fated, it would be pointless to make any effort to either bring that thing about, or try and prevent it from coming about. In antiquity, this objection found its philosophically most sophisticated articulation in the so-called Idle Argument (*ἀργὸς λόγος*), which claims to prove that fate-determinism leads to inertia or idleness.<sup>1</sup> The argument survives in Cicero's *On Fate* and in Origen's *Against Celsus*.<sup>2</sup> Both authors call it a sophism.

The general *idea* that complete necessitation of events leads to the destruction or futility of deliberation and making efforts (*βουλευέσθαι, πραγματεύεσθαι*) can be found already in Aristotle's *De Interpretatione* 9. But there is a difference between merely asserting the general idea and presenting an argument or proof for it, and the earliest philosopher in connection with whom the *argument* itself is mentioned is Chrysippus (Cic. *Fat.* 28–30).<sup>3</sup> There is some reason to think that it may have originated among the Megarics and logicians such as Diodorus Cronus.<sup>4</sup> The general idea and sometimes some vague remnants of the argument can be found in quite a number of later sources, often mixed up with related arguments.<sup>5</sup> However, as in the case of Aristotle earlier, these withered layers of the argument are no longer presented as fallacious, but as valid and sound.

The only attempted refutation of the argument which is connected with a philosopher's name or school is that by Chrysippus, handed down by

<sup>1</sup> The name of the argument, *ἀργός* (idle, lazy), may of course refer to 'idle' persons as well as to 'futile' actions and perhaps even to the 'futility' of the argument itself. This is probably no coincidence, cf. e.g. Long/Sedley 1987, i. 229. (*Ἀργὸς λόγος* is also sometimes translated 'Lazy Argument'.)

<sup>2</sup> Cic. *Fat.* 28–9, Origen, *Cels.* II 20, 342.62–71 (Borret). It is further mentioned in [Plut.] *Fat.* 574e, and part of a parallel argument occurs in Sen. *Nat. quaest.* II 38.3, for which see 5.1.2.3.

<sup>3</sup> Origen names the 'dialecticians' as discussants of the argument (*Cels.* II 20, 338.26–7). But that cannot here refer to anything but logicians in general. Cf. also Barnes 1985, n. 16.

<sup>4</sup> See below, 5.1.2.3.

<sup>5</sup> e.g. Alex. *Fat.* ch. 16; John Chrysostom, *Fat. et prov.* V (PG 50.765–8).

Cicero (*Fat.* 30). (It is likely that both the argument and the reply formed part of Chrysippus' second book on fate, see below.) There are further one incomplete version of a rebuttal in Origen (*Cels.* II 20, 342.71–82) and another in Seneca (*Nat. quaest.* II 37.3–38.4). Both make points related to Chrysippus' and both could be Stoic, although they may have been taken from texts later than Chrysippus (see below). It is important to see that Chrysippus' refutation is in the first instance just that: a refutation of the argument, based on his own doctrine of fate. It is *not* a defence of free-will, or a piece on prophecy, etc. It is also *not* a desperate attempt to escape the consequences of universal determinism. Nevertheless, it provides us with essential information about Chrysippus' determinism: among other things the refutation contains a coherent elaboration and application of the basic ideas of this theory in their relation to the concepts of causal relevance and intentional action.

It appears that Chrysippus' reply—perhaps in tandem with the general discussion of the argument in the early Hellenistic period—sparked off a number of different philosophical developments:

- Chrysippus' refutation was countered, in a standard way, by pointing out that it destroys that which depends on us; but note that that which depends on us does not feature at all in any of the reports of the Idle Argument.
- A rather unfortunate modification of the refutation emerges in Middle Platonist writings, documented for instance in [Plut.] *Fat.* 570ab, *Nem. Nat. hom.* 109–10, *Calc. Tim.* ch. 152, and *Alcinous*, ch. 26.
- The introduction of the concept of co-fatedness in Chrysippus' refutation was mixed up with the concept of conditional prophecies;<sup>6</sup> the latter is a topic with which Chrysippus had dealt as well.<sup>7</sup>

In later texts these three points are frequently combined and repeatedly confounded with bits of Chrysippus' refutation. But it is crucial to recognize that they were originally separate issues. The next sections deal in the main with the Idle Argument itself (5.1), with Chrysippus' refutation (5.2.1, 5.2.3, and 5.3.1–3), and—very briefly—with some related Stoic and non-Stoic replies to the argument, and the standard objections to the refutation (5.1.3, 5.2.2, 5.3.4).

<sup>6</sup> Cf. e.g. Servius, *ad Verg. Aeneid* IV 696, wrongly placed in the section on the Idle Argument by von Arnim in *SVF* ii. as 958. The fusion of prophecy and fate, or of something's being fated and being prophesied, is found quite often in later texts (especially Latin ones); this suggests that at this point the early Stoic and Chrysippean concept of fate had faded, was forgotten, or was no longer commonly understood.

<sup>7</sup> See Diogenianus in Eus. *Praep. ev.* 4.3.12–13 in connection with Alex. *Fat.* ch. 31 and above, 4.2.5.

## 5.1 THE IDLE ARGUMENT

## 5.1.1 Exposition of the argument

Our two sources for the Idle Argument are Origen, *Cels.* II 20 (342.62–71 Borret) and Cic. *Fat.* 28–9. Both passages present the argument in a clear and logically precise form. There is an almost literal correspondence between the two passages—if one disregards the fact that one is in Greek, the other in Latin. In both cases the argument is understood as an argument against determinism and is labelled as a sophism,<sup>8</sup> and a refutation follows it immediately. In its most detailed form, the argument runs as follows (the translation is of Origen's Greek version, since it is slightly more meticulous in its logical formulation):

- (1) If it is fated that you will recover from this illness, then, regardless of whether you consult a doctor or you do not consult <a doctor> you will recover.
- (2) But also: if it is fated that you won't recover from this illness, then, regardless of whether you consult a doctor or you do not consult <a doctor> you won't recover.
- (3) But either it is fated that you will recover from this illness or it is fated that you will not recover <from this illness>.<sup>9</sup>
- (4) Therefore it is futile to consult a doctor.<sup>10</sup>

Before analysing the argument itself, I consider the introductory and explanatory comments which accompany it in the two sources. Here Origen and Cicero differ. Origen reports:

... the so-called Idle Argument, which is a sophism, is of such a kind that it is told, supposedly, to a sick person, and, *qua* sophism, dissuades him from employing a doctor for his health. . . .<sup>11</sup> (*Cels.* 342.62–5)

<sup>8</sup> Cic. *Fat.* 30, *captiosum*; Origen, *Cels.* II 20, 338.26–7, 342.64 *σόφισμα*; cf. also [Plut.] *Fat.* 574e.

<sup>9</sup> Instead of (3) Cicero has the abridged formulation (3') 'but one of the two is (your) fate'. He may have wanted to spare his readership the 'redundancy' in the formulation.

<sup>10</sup> (1) εἰ εἴμαρται σοι ἀναστήναι ἐκ τῆς νόσου, εἴαν τε εἰσαγάγῃς τὸν ἰατρὸν εἴαν τε μὴ εἰσαγάγῃς, ἀναστήσῃ· (2) ἀλλὰ καὶ εἰ εἴμαρται σοι μὴ ἀναστήναι ἐκ τῆς νόσου, εἴαν τε εἰσαγάγῃς τὸν ἰατρὸν εἴαν τε μὴ εἰσαγάγῃς, οὐκ ἀναστήσῃ· (3) ἥτοι δὲ εἴμαρται σοι ἀναστήναι ἐκ τῆς νόσου ἢ εἴμαρται σοι μὴ ἀναστήναι· (4) μάτην ἄρα εἰσάγεις τὸν ἰατρὸν. (Origen, *Cels.* II 20 342.65–71)

Si fatum tibi est ex hoc morbo convalescere, sive tu medicum adhibueris sive non adhibueris, convalesces; item, si fatum tibi est ex hoc morbo non convalescere, sive tu medicum adhibueris sive non adhibueris, non convalesces; et alterutrum fatum est: medicum ergo adhibere nihil attinet. (Cic. *Fat.* 28–9)

The logical particles suggest that the formulation of the argument is Stoic: in particular, the use of 'either . . . or . . .' (ἥτοι . . . ἢ . . .) and the placing of the particles, including the negations, at the beginning of the sentences which make up their scope. As the refutation in *Fat.* 30 is Chrysippus', the present wording of the argument may go back to him.

<sup>11</sup> Ἀλλὰ καὶ ὁ ἀργὸς καλούμενος λόγος, σόφισμα ὢν, τοιοῦτός ἐστι λεγόμενος ἐπὶ ὑποθέσεως πρὸς τὸν νοσοῦντα καὶ ὡς σόφισμα ἀποτρέπων αὐτὸν χρῆσθαι τῷ ἰατρῷ πρὸς ὑγίειαν.

We are told how the practical use of the argument could lead to idleness. In a fictitious situation a sick person, after having been confronted with the Idle Argument, refrains from calling the doctor. Hence in some sense this person would be idle or non-active. This, of course, does not mean that Origen's source ever envisaged that the argument was actually employed in such situations. Rather this is what fate supporters, to whom the argument is addressed, are meant to consider, and what should make them give up their fate-determinism.<sup>12</sup> Origen's remark suggests that the formulation in the second person singular is no coincidence: in order for *inactivity* to occur it is essential that the potential agent is addressed with the argument (one can of course address oneself) and also that the activity in question (calling in the doctor) is an activity initiated by the agent addressed. But note that for the ascertainment of the *futility* of the action it is irrelevant whether the argument is formulated in the second or third person: a philosophical observer, watching the sick person summoning a doctor, could make a mental note of the utter pointlessness of that action.

Cicero's comments seem much more rigorous. He writes: 'If we follow this <argument> we will not carry out anything at all in life.' (*Fat.* 28) and 'this type of argument is rightly called idle or inert, since in this way all activity will be removed from life.' (*Fat.* 29).<sup>13</sup> While Origen deals only with the result of the argument in the very case at issue, Cicero generalizes the consequences. Not only would sick people refrain from calling doctors, but nobody would do anything any more—total passivity would result. From a philosophical point of view only this latter, generalized, consequence is of interest, and we can assume that the ancient proponents of the argument realized that. In order to justify this generalized conclusion the whole argument needs to be generalized. This could in principle be done either by universalizing all the premisses in a suitable way or by developing a formal scheme for the formation of any number of 'idle arguments'. The ancients seem usually not to have bothered with universalization or with extracting a scheme, but to have standardly used a paradigmatic argument as representative for a class of arguments.<sup>14</sup> It becomes clear from Cicero *Fat.* 30 that the Idle Argument was understood in this way. There Cicero talks of different cases of a genus of sophism of which the presented argument is one (*omnes igitur istius generis captiones . . .*). Still, we can extract a general scheme, and the following one may do:

<sup>12</sup> The Idle Argument can of course also be used for non-philosophical purposes; for instance, fatalists might justify their way of life by putting it forward. Argumentations of this general kind are common enough: 'This is going to happen whatever you do, so don't waste your time  $\phi$ -ing.' (The argument also makes an appearance in literature: in Gogol's *The Inspector General*.)

<sup>13</sup> ' . . . cui si pareamus, nihil omnino agamus in vita' (*Fat.* 28) and 'Recte genus hoc interrogationis ignavum atque iners nominaturum est, quod eadem ratione omnis e vita tolletur actio' (*Fat.* 29).

<sup>14</sup> Cf. e.g. the Mower Argument and the Heap Argument.



- (P1) If it is fated that  $A$ , then, whether or not you  $\Phi$ ,  $A$ .  
 (P2) If it is fated that not- $A$ , then, whether or not you  $\Phi$ , not  $A$ .  
 (P3) Either it is fated that  $A$  or it is fated that not- $A$ .  
 (C) Therefore (with regard to  $A$ )<sup>15</sup> it is futile (for you) to  $\Phi$ .

From this scheme one can recover the original argument by filling in  $p$  ('you will recover from this disease') for  $A$  and  $\phi$  ('call(ing) a doctor') for  $\Phi$ . Generally, in order to obtain different 'idle arguments' one has to insert indicative sentences expressing propositions  $p, q \dots$  in the  $A$ -slots and verbs expressing human action predicates  $\phi, \psi \dots$  in the  $\Phi$ -slots. One may think that the person addressed by 'you' in the whether-clause has to feature in  $p$ , but this is uncertain. However, the name of the argument, and the occurrence of the expression 'futile' or 'pointless' in the conclusion suggest that it was seen as essential for the argument that actions (or intentional human activities) come in for  $\Phi$ . For the expression 'futile' in the conclusion—if used in a non-metaphorical sense—makes sense only if supplemented in this way. The expression seems further to imply the possibility of a conscious and rational choice between performing or not performing (or at the very least pursuing or not pursuing) some activity. Still the phrase 'it is futile (for you) to  $\phi$ ' is ambiguous, and the sophistic character of the argument may partly depend on this.<sup>16</sup>

Has there to be a relation of a specific kind between  $p$  (and not- $p$ ) and  $\phi$ -ing? As far as the argument itself is concerned, no special relation is required. For the argument to 'make sense', any combination of propositions about the future and action predicates would be acceptable. (The conclusion would appear the more plausible, the less of a connection there is.) On the other hand, if one considers the Idle Argument as potentially leading to intentional inactivity—as its name implies—some relation would be required. For only if the addressee of the argument considers  $\phi$ -ing as in their power and as a means to a desired end  $p$  or not- $p$ , can the argument bring about any change of behaviour for the lazier.<sup>17</sup>

The above scheme of the Idle Argument contains only two variable expressions ( $A, \Phi$ ); two Stoic (or generally Hellenistic) logical constants (if . . . then ---; either . . . or ---); two expressions which appear to function like operators: 'it is fated that' in the premisses and 'it is futile' in the conclusion; finally there is the (constant) expression 'whether . . . or not . . . , ---' which, again, will prove crucial for the fallacious nature of the argument.<sup>18</sup>

<sup>15</sup> See 5.1.2.1.

<sup>16</sup> See below 5.1.4.

<sup>17</sup> See below, 5.1.3.2.

<sup>18</sup> One could try and analyse the phrase 'ἐάν τε . . . , ἐάν τε μή . . . , ---' as 'both if . . . , then --- and if not . . . , then ---', and to read this as a conjunction of two conditionals, but this is not the only way of understanding the phrase; cf. below, 5.1.4.

## 5.1.2 The plausibility of the argument

The Stoics (and the Middle Platonists) considered the Idle Argument as a sophism. As a sophism it has to fulfil the following two requirements: first it must be plausible, i.e. it must have the appearance of validity and soundness; and secondly it must in fact be invalid or unsound. In the present case the first requirement has to be modified in accordance with the function of the argument: it is levelled against fate-determinism. It is intended to show that fate-determinists (i) have to accept the argument's premisses and cannot deny its validity and (ii) cannot accept the conclusion (whereas fate-indeterminists would not accept the third premiss, and hence are not bound to accept the conclusion). The fate-determinists' response is: the argument is a sophism; (i) either it *seems* only valid, but is not, or at least one of the first two premisses *seems* only true, but is not; hence (ii) the conclusion cannot be established. Thus I interpret the argument in such a way that to fate-determinists *prima facie* its premisses *appear* true (5.1.2.1) and the argument *appears* valid (5.1.2.2).

## 5.1.2.1 The appearance of validity

When hearing the Idle Argument for the first time, one may obtain the impression that its conclusion *must* somehow follow—even though it is not quite clear how. A closer look at its formal structure shows that the argument is based on some non-explicit assumptions. The expression which dominates the conclusion ('it is futile') does not occur anywhere in the premisses, and its occurrence in the conclusion needs some explaining. Obviously a connection has to be drawn somehow between the phrases 'whether or not you  $\phi$ ' and ' $\phi$ -ing is futile'.

If we look at the three premisses we can see that there is a general argument scheme into which they would fit—though not the conclusion (C). This is the scheme of a dilemma, more precisely that of a complex, constructive, dilemma. This—valid—type of argument has the following general form (with ' $B$ ' for 'whether or not you  $\Phi$ ,  $P$ ' and ' $D$ ' for 'whether or not you  $\Phi$ , not  $P$ '): <sup>19</sup>

If  $A$ , then  $B$   
 If  $C$ , then  $D$   
 Either  $A$  or  $C$   
 Therefore either  $B$  or  $D$

Hence we know that we could infer the following conclusion from the three premisses of the Idle Argument:

<sup>19</sup> No doubt one can find some more specific schemata. I have chosen the present one so as to preserve all the ambiguities contained in the ordinary language formulation. See below 5.1.4.

Therefore either, whether or not you consult a doctor, you will recover; or, whether or not you consult a doctor, you will not recover.

and with  $p$  for 'you will recover' and  $\phi$ -ing for 'you consult a doctor':

(C') Therefore either, whether or not you  $\phi$ ,  $p$ ; or, whether or not you  $\phi$ , not- $p$ .

or in a less stilted manner 'therefore, independently of your  $\phi$ -ing either  $p$  or not- $p$ '. From (C') we can reach the conclusion of the Idle Argument (C) by means of a second syllogism, taking (C') as one premiss and adding the following conditional, with (C') as antecedent, as second premiss:

(P4) If either, whether or not you  $\phi$ ,  $p$  or, whether or not you  $\phi$ , not- $p$ , then, with regard to  $p$ , it is futile to  $\phi$ .<sup>20</sup>

(Or, again, expressed in a less complicated way, as 'If, independently of your  $\phi$ -ing either  $p$  or not- $p$ , then  $\phi$ -ing is futile with regard to  $p$ .') This, I think, has the plausibility that is needed, so that we can—provisionally—infer the original conclusion:

(C) Therefore, with regard to  $p$ , it is futile to  $\phi$ .<sup>21</sup>

(It is immaterial that the phrase 'with regard to  $p$ ' does not occur in the conclusion in our passages; it can be understood from the context and its omission does not affect the meaning.) If we suppose that this extra step, or something similar, was left out because it was considered self-evident, the Idle Argument actually appears valid—just as one would expect from a good sophism.<sup>22</sup>

<sup>20</sup> An alternative consequent would be ' $\phi$ -ing is futile with regard to  $p$  and not  $\phi$ -ing is futile with regard to  $p$ '. This is just a matter of choice as to how one wants to understand the phrase '... is futile with regard to ---', but cf. 5.1.3.2.

<sup>21</sup> We find such a two-step argument with a complex constructive dilemma in the first step and a (hidden) *modus ponens* in the (implicit) second step also in Ammonius' version of the Mower Argument (Amm. *Int.* 131.24–32). For the Mower Argument see above 2.1.2.2 and Seel 1993.

<sup>22</sup> Denyer 1981b, 61–3, in his presentation of a parallel case to the Idle Argument, draws the connection between '--- whether ... or not ...' and 'it is pointless ...' in the first and second premisses:

If it will be the case that  $p$ , then it is pointless to  $\phi$ .  
or in the present case it should rather be:

If it is fated that  $p$ , then it is pointless to  $\phi$ .

Here an intermediate step such as the following is skipped and can be reinstated:

If it is fated that  $p$ , then  $p$ , whether or not you  $\phi$ .

If  $p$  whether or not you  $\phi$ , then  $\phi$ -ing is pointless.

Formally, this suggestion works equally well. But it lacks historical plausibility (Denyer, of course, never claims that he discusses an ancient argument). Denyer's 'reconstruction' of the argument brings out one crucial ambiguity in the version of the Idle Argument he discusses (and which we do not have in Cicero's and Origen's version), but it conceals another one which is important for the Stoic understanding of the argument (see 5.1.4).

## 5.1.2.2 The truth-values of the premisses

Why should Chrysippus—or any fate-determinist—accept as true the premiss that ‘if  $p$  is fated, then  $p$ , regardless of whether you  $\phi$ ’? One way of persuading someone of its truth would be this: In a first step the principle of the unalterability or inevitability of fate is put forward:

If it is fated that you will recover, you will recover.

or in general:

If it is fated that  $p$ ,  $p$ .

This principle was generally accepted in Hellenistic times, by fate-determinists and fate-indeterminists alike.<sup>23</sup> Ancient philosophers who regarded only a part of earthly events as fated (e.g. Alexander of Aphrodisias), or even no events, would still agree to this statement. Only thinkers who consider fate as alterable, e.g. by way of prayers (so the Egyptian astrologers)<sup>24</sup> might reject it. But there is no sign that such a view was held by any Greek philosophers in the third century BC. In a second step the principle of the first step is strengthened to

If it is fated that you will recover, you will recover in any event ( $\pi\acute{\alpha}\nu\tau\omega\varsigma$ )<sup>25</sup>—i.e. not: perhaps you will recover, perhaps you won’t.

If it is fated that  $p$ , in any event  $p$ —i.e. not: perhaps  $p$ , perhaps not- $p$ .

In a third step the phrase ‘in any event  $p$ ’ is explicated along the lines of ‘nothing, including anything which is now in someone’s power, will prevent its being the case that  $p$ ’. From this it follows that

If  $p$  in any event, then your  $\phi$ -ing (calling the doctor) or your not  $\phi$ -ing (not calling the doctor) will not prevent  $p$ .

Hence,

(P1) If it is fated that  $p$ , then, whether or not you  $\phi$ ,  $p$ .

and

(P2) If it is fated that not- $p$ , then, whether or not you  $\phi$ , not- $p$ .

I do not claim that all these steps were made explicitly and separately in the way given. But the suggested general line of argument has the advantage that it is historically plausible, because it introduces only ideas which

<sup>23</sup> Remember that for Chrysippus this inevitability does not entail necessity, see 3.4.2.

<sup>24</sup> See e.g. *Nem. Nat. hom.* 106.14–20. Cf. *Sen. Nat. quaest.* II 36 for a similar point.

<sup>25</sup> ‘In any event’ or ‘definitely’ or ‘certainly’—the contrast is with ‘perhaps’ ( $\tau\acute{\alpha}\chi\alpha$ ); cf. the use of  $\pi\acute{\alpha}\nu\tau\omega\varsigma$  in related contexts, e.g. in Diogenianus in Eus. *Praep. ev.* 6.8.30, in the Mower Argument, and in Origen, *Cels.* II 20 and *Comm. III in Gen.* (fr.) = *Philocalia* 23.8 (Robinson).

Hellenistic philosophers had employed in related discussions of fate and logical determinism (see 5.1.2.3). The course of reasoning in support of the first two premisses, if accepted, should be so by fate-determinists and fate-indeterminists alike—as long as they accept the unalterability of fate.

The third premiss has the form of an exclusive and exhaustive disjunction, as is clear from the use of the (Stoic) logical particles 'either . . . or ---': either it is fated that you will recover or it is fated that you will not recover. There is no third possibility. This premiss is entailed by the general principle that for every pair of contradictory propositions of which one states that something will obtain, either it is fated that this thing will obtain, or it is fated that it is not the case that this thing will obtain.<sup>26</sup> (This principle may be called 'Principle of Excluded Middle Fate'.) One can show that Chrysippus—and presumably all early Hellenistic fate-determinists—had to accept this principle.

First, I assume that they held that if something will obtain, then it is fated that it will obtain, and if something will not obtain, then it is fated that it will not obtain. Secondly, Chrysippus (and early Stoic fate-determinists in general) also accepted the Law of Excluded Middle, that at any time either  $p$  or not- $p$  (see 2.1). From these two principles, taken together, one can infer that it holds for all future states of affairs  $p$  that either  $p$  is fated or not- $p$  is fated.<sup>27</sup> Thus, whoever accepts these two principles also has to accept that for every pair of contradictory propositions of which one states that something will obtain, either it is fated that this thing will obtain, or it is fated that it is not the case that this thing will obtain; and hence also has to accept that either it is fated that you will recover from this disease or it is fated that you will not recover, etc. On the other hand, philosophers who did not accept the Fate Principle had no reason to accept the third premiss of the Idle Argument either.

To sum up the results so far: the Idle Argument appears valid. Its first and second premisses can be understood in such a way that they would *prima facie* appear true to Chrysippus and everyone who accepts the unalterability of fate. The third premiss has to be accepted by Chrysippus

<sup>26</sup> Note that here the expression 'is fated' in phrases like 'it is fated that something will not obtain' is used not in the strict Stoic way which implies that that thing is caused. (For according to the Stoics something's not obtaining, being neither a motion nor a qualitative state, is not caused). Rather we have to take the Stoics to understand such phrases as a lax or short way of saying 'future occurrents are fated in such a way that the thing at issue will not obtain'.

<sup>27</sup> The argument is another constructive complex dilemma:

If  $p$ , it is fated that  $p$ .

If not- $p$ , it is fated that not  $p$ .

Either  $p$  or not- $p$ .

Therefore either it is fated that  $p$  or it is fated that not- $p$ .

(and by anyone who accepts the Fate Principle and the Law of Excluded Middle) but will not be conceded by fate-indeterminists. Thus, *if* the argument is valid, fate-determinists like Chrysippus would appear to have to accept the conclusion, i.e. that goal-directed actions are futile—but fate-indeterminists would not. And this is exactly the kind of understanding of the Idle Argument we were looking for (see above, 5.1.2).

### 5.1.2.3 The development from the Mower Argument to the Idle Argument

Historically, it is likely that the Idle Argument (i.e. the argument, not the general idea) came to life originally as an extended version of the Mower Argument (see 2.1.2) in the context of the debate about logical determinism. It is probably later than the latter since we know that Zeno was acquainted with the Mower, whereas there is no evidence for the Idle Argument before Chrysippus. The resemblance of the Mower and the Idle Argument is obvious, and we have two passages which present fragments of variations of the Idle Argument in which the similarity is striking. One is a reformulation of the Idle Argument in Cicero, following his report of the argument in *Fat.* 29. It has ‘it is true from eternity that *p*’ for ‘it is fated that *p*’ and ‘it is false from eternity that *p*’ for ‘it is fated that not-*p*’.<sup>28</sup> The other, in Seneca, *Nat. quaest.* II 37.3, has just ‘*p*’ instead of ‘it is fated that *p*’, and ‘not-*p*’ for ‘it is fated that not-*p*’.<sup>29</sup> In all cases *p* is a proposition about the future. We can construct from the latter a general scheme:

<sup>28</sup> Cicero only presents the first two premisses and then adds ‘etc.’.

<sup>29</sup> The topic of the passage in which this argument occurs, *Sen. Nat. quaest.* II 36–8, is the usefulness of vows and prayers in a fate-deterministic system, and the argument is combined with a refutation which is very close to Chrysippus’ refutation (see below 5.2.1.1 and 5.3.4). The ‘fragments’ of the argument are:

(P1) Either it (i.e. some future thing) will obtain or it will not obtain.

(P2) If it will obtain, then it will happen, even if you make no vows.

(P3) If it will not obtain, then, even if you make vows, it will not happen.

((1) ‘Aut futurum . . . est aut non’; (2) ‘si futurum est, fiet, etiamsi vota non suscipis’. (3) ‘si non est futurum, etiamsi susceperis vota, non fiet’.)

A conclusion is not given, but the context makes clear that it must have been assumed to be something like ‘therefore it is pointless to make vows’ (*‘Vota ergo suscipere nihil attinet’*). The argument differs from the Idle Argument in that it has ‘will obtain’ (*‘futurum est’*) instead of ‘is fated’ (*‘fatum est’*) and the third (here first) premiss is nothing but a version of the Excluded Middle for future things. But in the immediate context fate occurs several times and obviously both formulations were seen as equivalent (and so were ‘it will not obtain that’ (*‘non est futurum’*) and ‘it is fated that not’ (*‘fatum est non’*), as *Nat. quaest.* II 38.1 suggests). A further difference is that the premisses (1) and (2) express only that half of the pair of contradictory alternatives  $\phi$ -ing and not  $\phi$ -ing which is seen as possibly relevant for the obtaining of *p* or not-*p*. However, this does not significantly change the argument. (But cf. also 5.1.4 on the relevance of this point for Seneca’s understanding of the Idle Argument.)

- (P1\*) If  $A$ ,  $A$  whether or not you  $\Phi$ .  
 (P2\*) If not  $A$ , not  $A$  whether or not you  $\Phi$ .  
 (P3\*) But either  $A$  or not  $A$ .  
 (C\*) Therefore (with regard to  $A$ ) it is futile to  $\Phi$ .

Like the Mower, this version relies on the Excluded Middle for future propositions for its third premiss, and one can imagine the development of the first two premisses from those of the Mower Argument in the way suggested above for the justification of the first premisses of the Idle Argument (5.1.2.2), extending

If  $p$ , then in any event ( $\pi\acute{\alpha}\nu\tau\omega\varsigma$ ),  $p$

by a suitable gloss of 'in any event' to

If  $p$ , then whether or not  $q$ ,  $p$

and to

If  $p$ , then whether or not you  $\phi$ ,  $p$ .

Once the irrelevance of actions has been introduced, the conclusion about the futility of actions—as opposed to the elimination of 'perhaps' or of contingency—can be instituted.

In this variety of the argument with no mention of fate but of propositions about the future only, the whole argument is no longer levelled against fate-determinism but rather generally against those thinkers (including the Stoics) who claim the validity of the Law of Excluded Middle for all propositions, including future propositions. A version suitable for attacking fate-determinists in particular (which again include the Stoics) could have been obtained simply by modification of the future proposition ' $p$ ' to 'it is fated that  $p$ ' in the antecedents of the first two premisses and in the third premiss.

If the Idle Argument developed from the Mower Argument (via some such intermediate version about future propositions), the origin of the argument may lie with logicians like Philo and Diodorus Cronus. And given that Philo advocated a concept of the conditional very similar to that of material implication,<sup>30</sup> and that this concept appears to have been of some influence in Hellenistic logic, the first and second premisses of this version of the Idle Argument may have been backed up in a different way than the one suggested above (5.1.2.2): With Philo's concept of the conditional 'If  $p$ , then, if  $q$ ,  $p$ ' holds (for any proposition  $q$ ). Hence for  $q$ : 'whether or not you  $\phi$ ' we obtain 'If  $p$ , then whether or not you  $\phi$ ,  $p$ '—and similarly for the second premiss, substituting 'not- $p$ ' for ' $p$ '.

<sup>30</sup> For Philo's concept of the conditional cf. SE *PH* 2.110–11, *M* 8.112–17 and Bobzien 1999a.

But this kind of justification would not work in any straightforward way with the Idle Argument which is about fate (as we have it in Origen and in Cic. *Fat.* 28–9), or with Chrysippus' or Diodorus' concepts of the conditional.

### 5.1.3 *Futility and goal-directed activity*

Returning to the Idle Argument which is concerned with fate, one may still ask in which way the truth of the conclusion was regarded by the Stoics to be a threat to their fate-determinism.<sup>31</sup> For it is conceivable that a fate-determinist should react to the presentation of the Idle Argument by saying: 'OK, goal-directed activity is pointless; so what?' and live an 'idle' life ever after. There are two ways in which opponents of the Stoics could have tried to reveal an inconsistency in Stoicism.

First, they could have shown a discrepancy between Stoic fate-determinism and the life the Stoics led: they could have demonstrated that the Stoics did constantly indulge in means–ends deliberations and in vital but not necessarily pleasant actions like taking medicine or undertaking journeys. They could then have pointed out that the Stoics did not believe in their own doctrine, which would hardly be a recommendation for a philosophical school.<sup>32</sup> Secondly, they could have shown up an inconsistency between Stoic fate-determinism and other parts of Stoic philosophy, especially ethics. In their ethical theory the Stoics demand that people perform certain actions in a certain way in order to realize certain objectives (the *προηγμένα*) and thereby to strive at reaching a certain end (e.g. conformity with Nature). The same action would thus be described as both futile and morally commanded or commended.

In both cases the opponents' hope would be that the Stoics subsequently gave up the third premiss of the Idle Argument, and, as this premiss is entailed by their theory of universal fate, the latter would have to go as well. Hence—in addition to the logical challenge—Chrysippus must have had a strong philosophical interest in laying bare the fallacious nature of the argument.

However, before I look at the sophistic nature of the Idle Argument, and at Chrysippus' attempt at refuting it, first Cicero should be put in his place for his remark that 'total passivity' is the consequence of the Idle

<sup>31</sup> Is it not enough that the conclusion is utterly absurd? This would presumably suffice for the average person, but the appearance of absurdity has never yet deterred the Stoics from holding a particular view.

<sup>32</sup> If the Stoics were Sceptics of the Sextan type, they could of course retort that genuine happiness can only be attained by giving up unnecessary means–end deliberation, and that the Idle Argument would provide a useful instrument for this. But this was not the Stoic position.



Argument (*Fat.* 29). For the conclusion of the argument is only that it is pointless to consult the doctor, or, in general, to perform actions which are otherwise considered as a means to an end the agent desires. It does not tell us anything about passivity. The connection between futility of action and passivity can only be drawn if one makes a further assumption concerning the reaction of people who accept the Idle Argument as sound, for instance the assumption that anyone who comes to the conclusion that an action is pointless will refrain from performing it.<sup>33</sup> This carries some plausibility, but is open to several objections.

First, there is no warranty that people have or aspire to have a consistent set of beliefs by which their actions are determined. Hence even though someone may have been theoretically convinced by the Idle Argument—in that they accept all the premisses and consider the argument valid—this does not preclude that, when it comes to acting, they cannot help but believe that their actions are relevant to the outcomes, even if the Idle Argument proved otherwise. (A similar thought appears in *Alex. Fat.* 186.20–3.) Second, the Idle Argument allows us to infer the futility of not  $\phi$ -ing in the same way as that of  $\phi$ -ing. Hence the psychological, prognostic assumption ought to be modified to

If both  $\phi$ -ing and not  $\phi$ -ing are pointless, people will refrain from  $\phi$ -ing.

And this is a psychological statement which is hardly true. It does not have human prudence as basis, but human idleness—and idleness was meant to be the *result* of the argument. So here lurks, it seems, a *petitio principii*. Third, there is no reason to assume that in all cases in which an action  $\phi$  is futile with regard to some end the agent will not  $\phi$ . Psychologically it seems more plausible that a prudent agent will choose whatever is most convenient: if the agent is more inclined to  $\phi$  than not to  $\phi$ , even after disregarding all possible external ends of  $\phi$ -ing, the agent might well  $\phi$ —e.g. because (other things being equal) it is more pleasurable to  $\phi$ <sup>34</sup> or because the agent is a habitual  $\phi$ -er.<sup>35</sup> (Again, Alexander seems to have anticipated this point, cf. *Alex. Fat.* 186.30–187.8.)

<sup>33</sup> This assumption is a psychological and prognostic one. One could alternatively conceive of a practical prudential assumption, that people who come to the conclusion that an action is pointless think that they *should* refrain from it. Instead of predicting people's behaviour, this assumption would indicate what people think to be prudential or rational to do.

<sup>34</sup> Of course one could counter this by including instantiations of the Idle Argument of the kind: 'If it is fated that you will enjoy yourself, you will enjoy yourself whether or not you drink this glass of wine, etc.' But even then, other things being equal, the agent has, it seems, no more reason to drink the wine than not to. Moreover, one may doubt whether the pleasure an action provides can be separated from it in this way.

<sup>35</sup> This does not mean that the agent will act without intention or deliberation. For instance, after contemplating the Idle Argument someone may say to themselves 'but I've always  $\phi$ -ed, so I guess I can as well go on with it, even if it makes no difference'.

Hence, despite the name of the Idle Argument, the claim that it suffocates all activity in life is unfounded. It is not action altogether that would be avoided, but only actions insofar as they are goal-directed actions; more precisely, actions as means to a desired (external) end which are not desired in themselves. But this result, of course, would still be disturbing enough.

Interestingly, neither Chrysippus nor anyone else in Hellenistic times we know of objected to the Idle Argument in the following way: If everything is fated, so, too, is whether someone turns lazy as a result of being told the Idle Argument. Hence, in a fate-determinist system, becoming acquainted with the argument does not increase idleness in the world. Rather, everyone is exactly as lazy as they are fated to be. This reply takes the perspective of a world external ‘objective observer’, in that respect resembling the story told about Zeno, concerning his response to the slave who used fate as excuse (DL 7.23).<sup>36</sup> Perhaps we do not have this kind of counter because what was at the centre of the Idle Argument and bothered the fate-determinists most was not the resulting idleness but the futility of the actions: a clash between the claim of pointlessness of goal-directed activity and one’s own experience, viz. that there are actions that are relevant to reaching certain goals, and that ethics command goal-directed activity. This clash is not removed by a switch to the perspective of an ‘objective observer’.

#### 5.1.4 *Is the Idle Argument a sophism?*

Is the Idle Argument, as understood by the Hellenistic philosophers, a sophism? I do not think that this question admits of a clear answer. We have seen that some Hellenistic philosophers would have regarded the third premiss as false, others as true. Only the latter could accept the argument as sound (i.e. as valid and having true premisses). We have also seen that Hellenistic philosophers could take the remaining premisses to have the appearance of truth, and that the whole argument—if suitably interpreted—has the appearance of validity. Are these premisses true and is the argument valid? The answer depends on various factors. The Idle Argument was presented in ordinary language, and in more than one version, and several of the phrases and expressions used in it are ambiguous. Depending on which version one considers, in which way these phrases are understood, and whether they are taken throughout in the same way, the argument may turn out as valid or invalid, its premisses as true or false, and it may justify idleness or not. In this section I point out some of the

<sup>36</sup> ‘They say that Zeno was whipping a slave for stealing, and when the slave said “I was fated to steal”, he replied “and to be beaten”.’ (δοῦλον ἐπὶ κλοπῇ, φασιν, ἐμαστίγον τοῦ δ’ ἐπόντος, “εἵμαρτό μοι κλέψαι”, ἔφη, “καὶ δαρῆναι.”) We have little reason to assume that this anecdote is based on an actual occurrence.

ambiguities in the argument, restricting myself to those that may plausibly have played a role in the ancient understanding of the argument.

The first relevant difference concerns the expression (a) 'it is fated that  $p$ ', which occurs in the first three premisses. We saw that there existed a version of the Idle Argument, which is closely related to the Mower Argument, and has instead of 'it is fated that  $p$ ' simply ( $a_1$ ) a proposition about the future,  $p$ , or the expression 'it is true (has been true from eternity) that  $p$ '. The version with the phrase 'it is fated that  $p$ ' is again open to several interpretations. It can be understood ( $a_2$ ) as implying that there is some omnipotent, physical or metaphysical power which actively brings about  $p$ . There are several ancient concepts of fate that fit this description. The phrase can also be understood ( $a_3$ ) as synonymous to 'it is necessary that  $p$ '; in this case the various Hellenistic concepts of necessity will provide another range of different meanings.

Second, there is an ambiguity in the phrase (b) 'ἐάν τε <you  $\phi$ > ἐάν τε μὴ <you  $\phi$ >,  $p$ ' ('whether or not you  $\phi$ ,  $p$ ') from the first two premisses. It can be read ( $b_1$ ) in terms of sufficient conditions, as equivalent to 'if you  $\phi$ ,  $p$ , and if you don't  $\phi$ ,  $p$ '—as in the justification of the first two premisses given above in 5.1.2.3 and in their suggested justification *via* the expression 'in any event' (πάντως) in 5.1.2.2. In this reading, the conditionals would usually be taken as stating material or strict implication, or their ancient almost-counterparts, Philonian or Diodorean implication. If taken as material or as Philonian, the whole clause states nothing more than ' $p$ '.<sup>37</sup>

But the phrase 'whether or not you  $\phi$ ,  $p$ ' can also be read in terms of the absence of a necessary condition—the idea being that your  $\phi$ -ing is not required as a causally relevant factor for  $p$ . In this case, perhaps the most natural interpretation is ( $b_2$ ) to read the phrase in such a way that the consequent of the first premiss implies that  $\phi$ -ing is not a necessary condition of  $p$ , whereas the consequent of the second premiss implies that not  $\phi$ -ing is not a necessary condition of not- $p$ .<sup>38</sup> (Thus the meaning of the phrase in the consequent is not independent of the respective antecedent.) The first two premisses would then read:

(P1'') If it is fated that  $p$ , then  $p$ —even if you don't  $\phi$ .

(P2'') If it is fated that not- $p$ , then not- $p$ —even if you  $\phi$ .<sup>39</sup>

<sup>37</sup> For Philonian and Diodorean implication cf. SE *M* 8.112–17 and Bobzien 1999b. Chrysippus' concept of the conditional (see above 4.1.3 and Bobzien 1999b, section 1) and generally those types of implication summed up under the label of 'connexive implication' would be inadequate, since they would make statements like 'it will rain, whether or not you eat your supper' turn out false.

<sup>38</sup> This is how Seneca seems to have understood the argument; cf. above 5.1.2.3. n. 29.

<sup>39</sup> This is the formulation we find in Seneca's version of the argument, though with a different example: 'If it will obtain, then it will happen, even if you make no vows. If it will not obtain, then, even if you make vows, it will not happen.' Cf. 5.1.2.3. n. 29.

The phrase ' $p$ —even if you don't  $\phi$ ' in the first premiss can be rephrased as ' $p$  and your  $\phi$ -ing is not a necessary condition of  $p$ ' or as ' $p$  and it is not the case that if  $p$ , then you  $\phi$ '. On the assumption that the point is that  $\phi$ -ing is not causally relevant for  $p$ , the implication in the conditional clause should be stronger than material or Philonian: when transforming the negated conditional into a conjunction, one would expect a modal expression. 'Your  $\phi$ -ing is a necessary condition of  $p$ ' would become 'it is impossible that both  $p$  and you don't  $\phi$ ', and the first premiss 'If it is fated that  $p$ , then  $p$  and it is possible that both  $p$  and you don't  $\phi$ '—and accordingly for the second premiss. (Variations of  $(b_2)$  can be thought of. Its characteristic feature is that it implies that your  $\phi$ -ing is not a necessary condition of  $p$ .)

$(b_1)$  may appear to be the obvious reading to some, especially from the perspective of propositional logic. But it becomes clear that it goes counter to the common understanding of the phrase, if one considers that on this reading for instance the statement 'both, if you  $\phi$ ,  $p$  and if you don't  $\phi$ ,  $p$ , but  $\phi$ -ing is a necessary condition of  $p$ ' is perfectly consistent, and that generally by  $(b_1)$  nothing is ruled out as a necessary condition for  $p$ . For instance, 'you'll recover, whether or not you call the doctor, but calling the doctor is a necessary condition for your recovery' is consistent; it implies that it will not be the case that both you don't  $\phi$  and  $p$ .

Third there is an ambiguity in the expression 'it is futile/pointless ( $\mu\acute{\alpha}\tau\eta\nu$ , *nihil attinet*) to  $\phi$  (with regard to  $p$ )'. There is a rather meek notion of futility ( $c_1$ ), which in a way matches  $(b_1)$ . According to it, if  $p$  will obtain (or will obtain 'in any event'), then any action  $\phi$ -ing is pointless with regard to its going to obtain. This concept of futility says nothing about any physical or causal relations between  $p$  and  $\phi$ -ing. Even in a situation in which you both recover and call the doctor, and your calling the doctor is a necessary condition of and causally relevant to your recovery, your calling the doctor would still be pointless (in this sense) with regard to your recovery. Admittedly, as this example shows, this meaning of the expression ' $\phi$ -ing is futile' is a little uncommon. The reason I introduce it here is that it will facilitate comprehension of the sophistic nature of some versions of the Idle Argument. One characteristic feature of this concept of futility is that it cannot be invoked to justify idleness, as should be obvious from its disregard of any innerworldly, physical, relations.

There are several stronger and more common concepts of futility or pointlessness ( $c_2$ ) which all share the characteristic that if  $\phi$ -ing is futile/pointless with respect to some  $p$ , then  $\phi$ -ing is not a necessary condition for  $p$ . For instance the  $\mu\acute{\alpha}\tau\eta\nu$  can be understood in this way ( $c_2$ ):  $\phi$ -ing is futile with respect to some  $p$ , if (i)  $\phi$ -ing is not a necessary condition of  $p$  and (ii)  $\phi$ -ing is not causally relevant to  $p$ . With such a concept of futility, calling the doctor is futile if both (i) if you recover, you will recover

even if you don't call the doctor and (ii) in case you call the doctor and recover, your calling the doctor was not causally relevant to your recovery. But—unlike in case ( $c_1$ )— $\phi$ -ing would not be futile with regard to  $p$  if either  $\phi$ -ing is a necessary condition of  $p$ , or if you  $\phi$ , your  $\phi$ -ing is causally relevant to  $p$ . Note that with this concept of futility an action is not pointless as long as *if* you  $\phi$ , this is causally relevant to bringing about  $p$ —even if  $p$  would come about in some other way, if you did not  $\phi$ .

Alternatively, the  $\mu\acute{\alpha}\tau\eta\nu$  could be understood in this way ( $c_2''$ ):  $\phi$ -ing is pointless with respect to some  $p$ , if either (i)  $\phi$ -ing is not a necessary condition of  $p$ , or (ii) it is not causally relevant to  $p$ . In this case—unlike in ( $c_2'$ )—calling the doctor would be pointless also in the case in which if you called the doctor, this would causally contribute to your recovery, but if you did not, you would still recover, since something else would bring your recovery about. Both the concept of futility ( $c_2'$ ) and that of pointlessness ( $c_2''$ ) would I take it suffice to justify idleness with regard to  $\phi$ -ing.<sup>40</sup>

The above interpretations of the three crucial phrases in the Idle Argument are only roughly sketched, and the distinctions are not exhaustive. But they should help to differentiate between some of the main ways in which the Idle Argument can be understood. Depending on how one combines the alternative readings of the expressions, one obtains various valid and invalid arguments, most of which are sophisms or at least deceptive in some way. I discuss only a few of them, which are of some pertinence to the ancient discussion of the Idle Argument.

There are two very dissimilar valid versions of the argument. The first, ( $V_1$ ), belongs to the debate on logical determinism and is characterized by ( $a_1$ ,  $b_1$ ,  $c_1$ ):

- (P1)-( $a_1$ ,  $b_1$ )     If  $p$ , then if you  $\phi$ ,  $p$ , and if you don't  $\phi$ ,  $p$ .  
 (P2)-( $a_1$ ,  $b_1$ )     If not- $p$ , then if you  $\phi$ , not- $p$ , and if you don't  $\phi$ , not- $p$ .  
 (P3)-( $a_1$ )            Either  $p$  or not- $p$ .  
 (C)-( $c_1$ )             Therefore  $\phi$ -ing is pointless with regard to  $p$  in the sense that if something will obtain, any action is pointless with regard to its going to obtain.

( $V_1$ ) is concerned with propositions about the future, not with fate, and understands the phrase 'whether or not you  $\phi$ ,  $p$ ' in terms of sufficient conditions only. It has the shortcoming that it employs a concept of futility which does not justify idleness, and it is thus of no use to convince people that they need not bother to act.<sup>41</sup>

<sup>40</sup> Further variations of this kind of being  $\mu\acute{\alpha}\tau\eta\nu$  can be easily thought of; e.g. one may want to add the condition (iii) 'and not  $\phi$ -ing is not a necessary condition for not- $p$ ' after (i) in ( $c_2'$ ) and ( $c_2''$ ). What matters is that the concept of futility justifies idleness.

<sup>41</sup> With a concept of necessity like Diodorus', the version characterized by ( $a_3$ ,  $b_1$ ,  $c_1$ ) would also be valid. Its shortcoming would be the same.

A very different valid version, (V<sub>2</sub>), would be the one characterized by (a<sub>2</sub>, b<sub>2</sub>, c<sub>2</sub>):

- (P1)-(a<sub>2</sub>, b<sub>2</sub>) If it is fated that  $p$ , then  $p$ , and it is not a necessary condition of  $p$  that you  $\phi$ .<sup>42</sup>  
 (P2)-(a<sub>2</sub>, b<sub>2</sub>) If it is fated that not- $p$ , then not- $p$ , and it is not a necessary condition of not- $p$  that you don't  $\phi$ .  
 (P3)-(a<sub>2</sub>) Either it is fated that  $p$  or it is fated that not- $p$ .  
 (C)-(c<sub>2</sub>) Therefore  $\phi$ -ing is futile with regard to  $p$  in the sense that it is not a necessary condition of  $p$  that you  $\phi$ , and it is not a necessary condition of not- $p$  that you don't  $\phi$ .

(V<sub>2</sub>) combines a physical concept of fate with the phrase 'whether or not you  $\phi$ ,  $p$ ' in terms of the absence of a necessary condition, possibly in terms of the absence of a *causally relevant* necessary condition. The concept of futility could be invoked to justify idleness. This version is an argument about physical fatalism, concerned not with the truth of propositions about the future, but with the physical relations between occurrents. Its weakness lies in the first two premisses, whose truth seems open to question not only by indeterminists.

One obtains various invalid versions of the Idle Argument when one uses the expressions (a), (b), and (c) in different meanings in different premisses, or in premisses and conclusion. So, for instance, the ambiguity of the phrase 'whether or not you  $\phi$ ,  $p$ ' can be exploited.

An invalid version (V<sub>3</sub>), characterized by the physical concept of fate (a<sub>2</sub>) and a 'proper' concept of futility (c<sub>2</sub>), may use the interpretation of sufficient condition (b<sub>1</sub>) in the first two premisses, but switch to the concept of absence of necessary condition when the connection with futility is made.<sup>43</sup> If one conceives of the Idle Argument as implicitly drawing the intermediate conclusion (C') and using the premiss (P4) to reach the conclusion (C),<sup>44</sup> the switch from one reading of the phrase, (b<sub>1</sub>), to the other, (b<sub>2</sub>), can be located in (P4):

- (P1)-(a<sub>2</sub>, b<sub>1</sub>) If it is fated that  $p$ , then if you  $\phi$ ,  $p$ , and if you don't  $\phi$ ,  $p$ .  
 (P2)-(a<sub>2</sub>, b<sub>1</sub>) If it is fated that not- $p$ , then if you  $\phi$ , not- $p$ , and if you don't  $\phi$ , not- $p$ .  
 (P3)-(a<sub>2</sub>) Either it is fated that  $p$  or it is fated that not- $p$ .  
 (C')-(b<sub>1</sub>) Therefore either if you  $\phi$ ,  $p$ , and if you don't  $\phi$ ,  $p$  or if you  $\phi$ , not- $p$ , and if you don't  $\phi$ , not- $p$ .

<sup>42</sup> One possible way of taking 'it is not a necessary condition of  $x$  that  $y$ ' would be as 'it is not the case that if not  $y$ , then not  $x$ ', with something like the Chrysippean conditional for 'if . . . , then ---'.

<sup>43</sup> Similarly (V<sub>3</sub>), with (a<sub>1</sub>) instead of (a<sub>2</sub>). Various other sophistic combinations of the phrases are possible, as readers may like to work out for themselves.

<sup>44</sup> See above, 5.1.2.1.

- (P4)-(b<sub>2</sub>, c<sub>2</sub>) If *either*  $p$ , and your  $\phi$ -ing is not a necessary condition of  $p$  or not- $p$ , and your not  $\phi$ -ing is not a necessary condition of not- $p$ , then  $\phi$ -ing is futile with regard to  $p$  in the sense that  $\phi$ -ing is not a necessary condition of  $p$ , and not  $\phi$ -ing is not a necessary condition of not- $p$ .
- (C)-(c<sub>2</sub>) Therefore  $\phi$ -ing is futile with regard to  $p$  in the sense that  $\phi$ -ing is not a necessary condition of  $p$ , and not  $\phi$ -ing is not a necessary condition of not- $p$ .

Or, alternatively, the switch may happen in (C'), so that we have the previous version, except that (C') is understood this time as:

- (C')-(b<sub>2</sub>) Therefore *either*  $p$ , and your  $\phi$ -ing is not a necessary condition of  $p$  or not- $p$ , and your not  $\phi$ -ing is not a necessary condition of not- $p$ .

A different type of sophism, or at least of deceptive reasoning, are those versions in which in the same premiss the expression is taken in one way, when its truth is established, and in another when it is employed in the inference. For instance, we could think of a version (V<sub>4</sub>), which takes the valid version (V<sub>2</sub>) from above, which was characterized by (a<sub>2</sub>, b<sub>2</sub>, c<sub>2</sub>) in the inference, but justified the truth of the premisses (P1)-(a<sub>2</sub>, b<sub>1</sub>) and (P2)-(a<sub>2</sub>, b<sub>1</sub>) instead of (P1)-(a<sub>2</sub>, b<sub>2</sub>) and (P2)-(a<sub>2</sub>, b<sub>2</sub>), since this understanding of the premisses has much more plausibility.<sup>45</sup> Alternatively, one could conceive of a version (V<sub>5</sub>), which is characterized by (a<sub>1</sub>, b<sub>1</sub>, c<sub>2</sub>), which is valid, *if* it is taken to contain the implicit conclusion (C')-(b<sub>1</sub>) and the implicit premiss (P4)-(b<sub>1</sub>, c<sub>2</sub>):

- (P4)-(b<sub>1</sub>, c<sub>2</sub>) If *either* if you  $\phi$ ,  $p$ , and if you don't  $\phi$ ,  $p$  or if you  $\phi$ , not- $p$ , and if you don't  $\phi$ , not- $p$ , then  $\phi$ -ing is futile with regard to  $p$  in the sense that  $\phi$ -ing is not a necessary condition of  $p$ , and not  $\phi$ -ing is not a necessary condition of not- $p$ .

Here the truth of (P4)-(b<sub>1</sub>, c<sub>2</sub>) is questionable, but this could be disguised by employing (b<sub>2</sub>) rather than (b<sub>1</sub>) when one justifies the premiss, i.e. by actually establishing the true (P4)-(b<sub>2</sub>, c<sub>2</sub>) but then using the doubtful (P4)-(b<sub>1</sub>, c<sub>2</sub>) in the inference.

Whether or not an argument is a sophism can be up to a certain point a subjective question, since it depends on how an individual understands the premisses and conclusion of the argument. But I think that it has become obvious that in the case of the Idle Argument there are enough possibilities to be fooled by it, as long as it has not been analysed in some detail, and one can certainly say that it contains various sophistic elements or lends itself to be interpreted as a fallacy. The next sections (5.2, 5.3) investigate how Chrysippus dealt with this argument and how he mastered the problem of the compatibility of purposeful action with his determinism.

<sup>45</sup> Analogously (V'<sub>4</sub>) with (a<sub>1</sub>) instead of (a<sub>2</sub>).

## 5.2 REPLIES TO THE IDLE ARGUMENT: THE SOURCES

In both Cicero and Origen the presentation of the Idle Argument is followed by a refutation. Cicero names Chrysippus as author. There is a third text which provides evidence about Chrysippus' reaction to the argument: Eusebius' *Preparation for the Gospel* 6.8.25–38. The three passages differ in several essential respects, and also their reliability as sources for Chrysippus' reply varies. In this section I examine these passages first individually—what they say, what difficulties they raise—and then suggest how they interrelate. This provides the basis for a discussion of the philosophical meaning and status of the refutation and its general implications for Chrysippus' determinism in section 5.3.

### 5.2.1 Cicero, On Fate 30

Here is first what Cicero reports:

- (1) This argument<sup>46</sup> is criticized by Chrysippus:
- (2) For, he says, some things are simple, others are conjoined.
- (3) 'Socrates will die on such and such a day' is simple: his day of death is determined, whether or not he does something.
- (4) But if the fate is of the following kind: 'Oedipus will be born to Laius', one cannot say: 'whether or not Laius has intercourse with a woman'.
- (5) For the thing is conjoined and co-fated.
- (6) He calls it this because fate is such that both Laius will have intercourse with his wife and by her he will father Oedipus, just as if it were said: 'Milo will wrestle at the Olympics' and someone replied 'hence he will wrestle, whether or not he has an opponent' he would be mistaken; for 'he will wrestle' is conjoined, because there is no wrestling without an opponent.<sup>47</sup>

So, Chrysippus grounded his refutation on a distinction between two types of things, simple ones and conjoined ones; and he gave examples for both. 'Thing' renders the Latin *res*. What the corresponding Greek term was

<sup>46</sup> 'This argument' must refer to the original (first) formulation of the Idle Argument in Cic. *Fat.* 28–9, not the reformulation without the word 'fate' (*Fat.* 29). For fate features throughout in the refutation (*fatum* twice, *fatalis* once, and the term *confatalis*, which is essential in the refutation, refers to fate as well).

<sup>47</sup> (1) Haec ratio a Chrysippo reprehenditur: (2) Quaedam enim sunt—inquit—in rebus simplicia, quaedam copulata. (3) Simplex est: Morietur illo die Socrates; huic sive quid fecerit sive non fecerit, finitus est moriendi dies. (4) At si ita fatum est: Nascetur Oedipus Laio, non poterit dici: sive fuerit Laius cum muliere sive non fuerit; (5) copulata enim res est et confatalis (6) sic enim appellat, quia ita fatum sit et concubiturum cum uxore Laium et ex ea Oedipum procreaturum, ut, si esset dictum: 'Luctabitur Olympiis Milon' et referret aliquis: 'Ergo sive habuerit adversarium sive non habuerit, luctabitur', erraret; est enim copulatum 'Luctabitur', quia sine adversario nulla luctatio est.



(if any) is uncertain. The passage itself tells us that both 'to be conjoined' and 'to be co-fated' are properties of the things referred to as *res* (5). We can infer from this that Chrysippus made a distinction either of things that *are* fated, or of things that *can* in principle *be* fated: i.e. either of that which actually occurs (*γνώμενα*) or of that which could occur. Since all examples are of fated things, I suggest provisionally that the distinction is one between things that as a matter of fact occur or obtain at some time, i.e. of occurrents or of facts; this will be confirmed later (5.2.3.1). The hybrid status of the things that actually occur (*γνώμενα*, *κινήσεις*, *σχέσεις*) in the Stoic understanding between actualizations of proposition, states of affairs, and events (cf. 1.1.3) may account for the diversity of views about what kind of entities the simple and conjoined things were: suggestions range from propositions over facts and states of affairs to events.<sup>48</sup>

#### 5.2.1.1 Simple occurrents, conjoined occurrents, and co-fated occurrents<sup>49</sup>

Cicero adduces one example for a simple occurrent (*res simplex*):

Socrates will die on such-and-such a day (3).<sup>50</sup>

As explanation for its simplicity Cicero reports:

His day of death is determined, whether or not he does something (3).

From this one may extract tentatively as a general criterion for simplicity: an occurrent is simple if it will obtain whatever actions the person involved performs or refrains from performing.<sup>51</sup> If this is the criterion, 'Socrates will die on such-and-such a day' is simple because Socrates will die on that particular day, which is fated to be his day of death,<sup>52</sup> whatever he may do. Now, why Chrysippus should have thought this is at the very least puzzling. For one would think that e.g. suicide would have brought forward his day of dying, and trying to escape from prison could have either shortened or prolonged his life. Many other actions can be conceived of which would have changed the actual day of Socrates' death. True, in antiquity there was the idea 'around' that only things like people's dates of birth and death

<sup>48</sup> e.g. propositions (Rist 1969, 120); facts (Kneale 1962, 124); *Sachverhalte* (Talanga 1986, 130); states of affairs/events (White 1985, 122); events (Long/Sedley 1987, i. 343, Sedley 1993, 315). Reesor's assumption (1965, 294) that the distinction is between types of oracles can perhaps be dismissed.

<sup>49</sup> The problems touched upon in this section receive a more thorough treatment in later sections, when all the relevant evidence has been assembled.

<sup>50</sup> 'On such-and-such a day' (*illo die*) may stand in for a time indexical (in line with the usual practice in Stoic logic) or for an actual date (as we have it in Cic. *Fat.* 19). Either way it would be used to refer to the day of Socrates' death.

<sup>51</sup> The criterion could be more general: whatever actions *any person* would do or refrain from doing.

<sup>52</sup> That his death was understood to be fated becomes clear from the next sentence (4), which begins 'But if the fate is of the following kind . . . '.

were fated.<sup>53</sup> But I can find no traces of this view in early Hellenistic philosophy, and there is no reason to assume that it is early Stoic. Moreover, it seems to be inconsistent with Chrysippus' theory of universal fate. So this idea of restricted fate does not help.<sup>54</sup> Thus it seems that we have a reasonably clear criterion for simplicity of occurrents, but an example that does not quite fit. (The point will be re-examined in 5.3.1 below).

The second type of occurrents is conjoined occurrents (*res copulatae*). Cicero gives two examples: 'Laius will have a son Oedipus' and 'Milo<sup>55</sup> will wrestle at the Olympics'. Thus, against expectation, the expression *copulata res* is not used for a conjunction of two occurrents (like 'Laius will have a son Oedipus and he will have intercourse with Jocasta'); but something is called *copulatum* if it is conjoined (in a sense still to be determined) with something else.<sup>56</sup> That is, although 'to be conjoined' has the appearance of a relational predicate, it is treated as a monadic one ('*x* is conjoined <to something>' instead of '*x* and *y* are conjoined'). A translation like 'complex' would hence be misleading.

The reasons why the two examples give conjoined occurrents are that in the case of Laius one cannot say

whether or not he has intercourse with a woman (4),

and in the case of Milo it would be a mistake to say

whether or not he has an opponent (6).

Can one generalize from these two cases and distil a general criterion for conjoinedness? One possibility is that an occurrent *p* is conjoined if there is at least one other occurrent *q*, prior or simultaneous to *p*, such that '*p*, whether or not *q*' is a false statement. But if this is the general criterion, there arises a problem if one compares it with that of simple occurrents: the latter seemed to concern actions whereas the criterion of conjoinedness seems to concern occurrents in general. (Cicero's second example of conjoined occurrents does not include an action, but 'having an opponent'.) Thus the distinction between simple and conjoined events seems not exhaustive, even though this is suggested by the way Cicero introduces them in (2). There are two ways in which one could obtain an exhaustive disjunction: either the criterion for simple occurrents is in fact 'whether or not something (else) will obtain' ('sive quid futurum est sive non est'),

<sup>53</sup> Cf. e.g. Adkins 1960, 17 and 119; this view is often connected with the idea of 'astrological fate'.

<sup>54</sup> Sedley 1993, 315–19 suggests that the event is simple because it corresponds to a simple, i.e. unconditional, prophecy of Socrates' death, as reported in Plato's *Crito*. This view fails to explain how Chrysippus' distinction can be part of a refutation of the Idle Argument (see below 5.3.1).

<sup>55</sup> i.e. Milo of Croton, famous athlete of the 6th cent. BC.

<sup>56</sup> See also Barnes 1985, 234.

which would shrink the class of simple occurrents; or the 'whether-or-not' phrase in the criterion for conjoinedness concerns human actions only; that is, the things a conjoined occurrent is conjoined with are actions. In this case, 'having an opponent' in (6) should be read as short for something like 'if someone takes up the challenge', or else some other explanation is needed.<sup>57</sup> (This problem is taken up again in 5.3.1.)<sup>58</sup>

Cicero tells us that the criterion of conjoinedness is satisfied in the case of the Milo example, since 'there is no wrestling without an opponent'. The presence of an opponent is a *necessary condition* for a wrestling match. One can easily construct a parallel for the Laius example: Laius cannot have children without having intercourse with a woman. Having intercourse is a necessary condition (or was thought to be in antiquity) for a man to father a child. Both these relations of necessary condition hold universally.<sup>59</sup>

It remains to be considered, what co-fated occurrents (*res confatales*) are. 'Oedipus will be born to Laius' is called not only 'conjoined' but also 'co-fated' (5). And we should think that the same holds of 'Milo will wrestle at the Olympics', if we assume that this is fated and hence will obtain. Again, 'to be co-fated' looks like a relational predicate, but is used as a monadic one. One occurrent is co-fated if it stands in a certain relation to another occurrent. Obviously, the fact that there is a second occurrent that happens also to be fated does not suffice to make the first co-fated. For in this way, since for Chrysippus every occurrent is fated, every occurrent would be co-fated, including e.g. Socrates' death on such-and-such a day—and this cannot be. What kind of relation is then required? Cicero's explanation for why 'Oedipus will be born to Laius' is co-fated is (i) that it is fated both that Laius will have a son Oedipus and that Laius will have intercourse, and (ii) that these two occurrents are related in the way 'Milo is wrestling' is related to his having an opponent: the co-fated occurrent has the occurrent it is co-fated with as a necessary condition.

The non-contingent connection between the two fated occurrents required for co-fatedness is hence that of a necessary condition which was introduced as a criterion for conjoinedness: If a fated occurrent is conjoined then it is co-fated. And it is co-fated with the occurrent it is conjoined with.<sup>60</sup> Thus both relations are based on necessary conditionhood

<sup>57</sup> Note that the Milo example is employed in order to explain the Laius example. This could account for why no action comes in: it is not a counterexample to the Idle Argument but an illustration of a relation of necessary condition. But see also below 5.2.3.2.

<sup>58</sup> The literature is divided on this point: e.g. Rist 1969, 120, and White 1985, 122, assume events in general, Long/Sedley 1987, i. 343, Sorabji 1980b, 228, and Botros 1985, 288, assume actions.

<sup>59</sup> It has even been suggested that both examples involve a conceptual relation of necessary condition (White 1985, 123), but I am not convinced by this claim.

<sup>60</sup> Cf. on this point also Barnes 1985, 235.

and both are not symmetrical: if  $p$  is conjoined and co-fated, and it is conjoined and co-fated with  $q$ , it does not follow that  $q$  is conjoined or co-fated. And only in exceptional cases would  $q$  be conjoined or co-fated with  $p$ . Note further that the relation of co-fatedness is not introduced as holding between generic entities, such as event types, but between those things that will actually obtain, i.e. between occurrents or facts.

### 5.2.1.2 Chrysippus' refutation in Cicero

The next sentence in Cicero is:

(7) Thus all sophisms of that kind can be refuted in the same way.<sup>61</sup>

Hence at least Cicero thinks that at this point, after the presentation of Chrysippus' distinction of simple and conjoined occurrents and its exposition, the refutation is completed. So what has been achieved by this distinction? The place where Chrysippus locates the fallaciousness of the Idle Argument is the first premiss, or more generally, the premiss in which the relation between a goal-directed action and its prospective outcome is expressed.<sup>62</sup> For him, although all instantiations in the scheme of the Idle Argument may appear sound, as a matter of fact, some are not.

The first (and second) premisses are certainly *true* in those cases in which the occurrent which in the antecedent is hypothetically assumed to be fated is simple. Hence, according to Chrysippus, in instantiations with propositions of simple occurrents in the antecedent (and action predicates in the respective slots in the consequent) the scheme of the Idle Argument produces sound arguments. The first or second premiss is *false* in those cases in which the occurrent or fact which in the antecedent is hypothetically assumed to be fated is conjoined, and in the consequent an action predicate is inserted of an action with which they are conjoined. In these cases the arguments are not sound and it has not been proved that the action at issue is futile.

The disjunction is not exhaustive. But it seems clear that in the remaining cases, i.e. those in which the antecedent contains a conjoined occurrent and the consequent introduces actions which are not conjoined with it, the resulting 'idle arguments' must be sound as well. Take for instance 'if you are fated to recover, then you will recover whether or not the Prime Minister has a second helping at lunch today'. The kind of sophisms which

<sup>61</sup> Omnes igitur istius generis captiones eodem modo refelluntur.

<sup>62</sup> There can be no doubt that the phrase 'whether or not . . .' in (3), (4), and (6) each time picks up this phrase from the first premiss of the Idle Argument, and that the phrases 'one cannot say' in (4) and 'he would be mistaken' in (6) indicate the falsehood of the consequent of the first premiss of the respective 'idle argument'. The latter point also makes it clear that Chrysippus understood the phrase 'whether or not you  $\phi$ ,  $p$ ' as implying that  $\phi$ -ing is not a necessary condition of  $p$  (cf. above 5.1.4). For the details of the refutation see below 5.3.3.

Cicero claims can all be refuted in the same way (7), must hence be those which have, in their first or second premiss, a conjoined and co-fated occurrent, and the occurrent it is conjoined and co-fated with.

The refutation of the parallel argument to the Idle Argument in Sen. *Nat. quaest.* II 37.3–38.1 makes exactly the same two points as Chrysippus does according to Cicero: after the presentation of the argument<sup>63</sup> the text continues

Such an argument is incorrect, since you pass over this alternative between the two: ‘This will obtain, but only if vows are made.’ He says that it is necessary that this, too, is encompassed in fate, that you make vows or that you don’t.<sup>64</sup> (*Nat. quaest.* II 37.3–38.1)

There are pairs of a human activity (making vows) and a fated occurrent (unspecified) in which the performance of the activity is a necessary condition of the fated occurrent, and in those cases the activity is fated as well, since it, too, is encompassed in fate. In *Nat. quaest.* II 38.1 it is explicitly stated that either it is fated that the activity obtains, or that it does not obtain. The close parallels leave little doubt that this passage goes back to Chrysippus’ refutation, although the context seems not early Stoic and there is insufficient evidence for the assumption that Seneca drew directly on Chrysippus.

Cicero concludes his report from Chrysippus by returning to the original version of the Idle Argument, i.e. the doctor example. Chrysippus thinks that it is a sophism of the kind described:

(8) ‘Whether or not you consult a doctor, you will recover’ is fallacious<sup>65</sup>

The justification, however, is not quite as expected:

(9) for consulting a doctor is just as much fated as recovering.<sup>66</sup>

Here a couple of steps have been skipped. Clearly it has been—for the moment—supposed that it is fated that the sick person will recover. That is, on the assumption that the recovery is fated, so is calling in the doctor. Cicero also does not mention that for Chrysippus ‘you will recover’ expressed a conjoined occurrent, and that it is conjoined with ‘calling a doctor’; this is something else we have to add.

<sup>63</sup> For text and translation of the argument see above 5.1.2.3 n. 29.

<sup>64</sup> *Falsa est ista interrogatio, quia illam mediam inter ista exceptionem praeteris: futurum hoc est, sed si vota suscepta fuerint. Hoc quoque, inquit, ipsum necesse est fato comprehensum sit ut aut suscipias vota aut non.*

(The next sentence makes it clear that what is fated is either that vows are made, or that vows are not made—not that either vows are made or not.)

<sup>65</sup> ‘Sive tu adhibueris medicum sive non adhibueris, convalesces’ captiosum.

<sup>66</sup> tam enim est fatale medicum adhibere quam convalescere.

In Cicero the story ends with (9), and nothing suggests that Cicero was not satisfied with the refutation. As he presents it, it is however not altogether satisfying. For the case of the sick person seems to differ significantly from the cases of Laius and Milo. There holds no universal relation of necessary condition between calling a doctor and recovering. One might well recover without consulting a doctor.<sup>67</sup> Hence the universality of the relations in the case of Milo and Laius cannot have been the key point of the refutation. This is a third problem to which I return below—in 5.3.2.

### 5.2.2 Origen, Against Celsus II 20, 342.71–82

Thus the Cicero passage does not provide sufficient information for a full understanding of Chrysippus' refutation. No other source states that it presents Chrysippus' reply to the Idle Argument. But since Origen's report of the argument, too, is followed by something like a refutation (*Cels.* II 20, 342.71–82), it seems natural to look for further information there. As often, Origen names neither source nor author.<sup>68</sup> The passage is brief and consists of two parts: a refutation by analogy or parabolic refutation (*παραβολή*),<sup>69</sup> followed by a single explanatory sentence.

#### 5.2.2.1 The refutation in Origen

A parabolic refutation is a kind of refutation by analogy which works by constructing an argument logically isomorphic to the one in question, but which leads to obvious falsehoods or absurdities. It was a common way of arguing among the Stoics.<sup>70</sup> Origen's analogous argument (*Cels.* II 20, 342.72–77) is exactly parallel to the doctor example, down to the logical particles and grammatical details, and perfectly fits the 'scheme' of the Idle Argument I introduced above (5.1.1). The future proposition is 'you will father a child', the part of the consequent which gives the action is 'you will have intercourse with a woman'. The resulting instantiation seems to have the 'absurd' result (in the first premiss) that if a man is fated to father a child, this will happen even without intercourse with a woman.

<sup>67</sup> So noticed in Calc. *Tim.* ch. 161, shortly after a passage which presents examples of things that are fated together: '... that it happens often that the sick person is cured not by a doctor but by some lay person, when such is what the decree (of fate) conditioned.' ('fieri frequenter, ut non a medico sed ab inperito curetur aeger, cum talis erit condicio decreti'). Not to mention that one might die *because* one consulted the doctor, etc. and in certain cases Chrysippus would perhaps even have agreed that dying from a disease is a simple occurrent, namely in the case of certain injuries or diseases that are fatal.

<sup>68</sup> He only names 'the Greeks' as authorities for the whole passage.

<sup>69</sup> 'But something like the following is nicely set against this argument by way of analogy:' (*Cels.* II 20, 342.71–2 *ἀλλὰ χαριέντως τοῦτω τῷ λόγῳ τοιοῦτόν τι ἀντιπαραβάλλεται*). Barnes 1985, 234 n. 21, has drawn the connection to the parabolic refutation.

<sup>70</sup> Cf. Schofield 1983.

Now, 'the *παραβολή* is a beautiful way of objecting to an argument. It shows . . . that there is something wrong with the argument without having to venture any disputable hint as to *what* might be wrong with it'.<sup>71</sup> In a parabolic refutation it is usually the conclusion of the parallel argument which appears to be absurd. But in the present case, the parallel argument makes clear that there is 'something wrong' (without saying what is wrong) with the *first premiss*—which is exactly what is needed, since the conclusion is absurd already in the doctor example itself.

The subsequent explanatory sentence is not of much help to show *what* is wrong in the first premiss. It runs:

For, as (i) in this case <i.e. the woman example>, since it is inconceivable and impossible that someone who does not cohabit with a woman produces a child, it is not futile to introduce 'cohabit with a woman', so (ii) <in the former case> if the recovering from a disease happens by way of the medical art, the doctor is introduced necessarily and the <conclusion> 'it is futile for you to consult the doctor' is false.'<sup>72</sup> (*Cels.* II 20, 342.77–9)

The main point in this sentence seems to be that the conclusion of the doctor example is false because it is incompatible with the truth that (on certain conditions) there holds a relation of necessary condition between medical treatment and recovery (ii). But the falsehood of the conclusion was granted anyway. What the fate-determinists need to show is that either one of the first two premisses is false, or the argument invalid. Hence, from a fate-determinist point of view, Origen's explanation, as it stands, is not successful as a refutation.

With a generous portion of good will and imagination one could perhaps understand the second half of the explanatory sentence as a muddled and abridged way of saying that calling in the doctor is a necessary condition for recovery, that hence the first premiss is false, and hence the truth of the conclusion cannot be deduced. But even then it is still left open whether the principle of the unalterability of fate is retained, and the outcome is

if *p* is fated and  $\phi$ -ing a necessary condition for *p*, then both *p* and  $\phi$ -ing occurs, or whether the principle is given up, and the result is rather

if *p* is fated and  $\phi$ -ing is a necessary condition for *p*, then *p*, if someone  $\phi$ -s, otherwise not-*p*.

<sup>71</sup> Schofield 1983, 35.

<sup>72</sup> *Ὡς γὰρ* (i) ἐπὶ τούτου, ἐπεὶ\* ἀμήχανον καὶ ἀδύνατον τεκνοποιῆσαι μὴ συνελθόντα γυναικί, οὐ μάτην παραλαμβάνεται τὸ συνελθεῖν γυναικί· οὕτως (ii) εἰ τὸ ἀναστήναι ἐκ τῆς νόσου ὁδῶ τῇ ἀπὸ ἰατρικῆς γίνεται, ἀναγκαίως παραλαμβάνεται ὁ ἰατρός, καὶ ψεῦδος τὸ "μάτην εἰσάγεις τὸν ἰατρόν".

\* The manuscripts vary between *εἴπερ* and *ἐπεὶ*.

According to Cicero, on the other hand, Chrysippus clearly opted for the first alternative. Still, since Origen approves of what he reports and employs it to back up his view, which includes the belief that god knows everything in advance, we may divine that the principle of unalterability of fate (*qua* unalterability of god's pre-knowledge) was maintained at least by Origen, if not also by his source.

#### 5.2.2.2\* Note on the attribution of the Origen passage

The Origen passage is commonly taken to be Stoic in origin.<sup>73</sup> It has even been suggested that it stems originally from Chrysippus and that Origen presumably quoted *verbatim* from one of Chrysippus' books on fate.<sup>74</sup> The reasons that have been put forward are:

- (a) in both Cic. *Fat.* 30 and in the refutation in Origen we have the construction of formally parallel but evidently unsound arguments;
- (b) the preceding formulation of the Idle Argument in Origen is almost identical with Cicero's;
- (c) in both sources a necessary relation between the fated occurrent and the allegedly pointless action is claimed to hold;
- (d) the woman example is a parallel to Cicero's Laius example;
- (e) Laius occurs in Origen's text just a little earlier;
- (f) Origen studied Stoic works.

But these reasons are perhaps not sufficient to warrant Chrysippus' authorship of the refutation:

- (a) First, the two refutations are very different types of arguments. Unlike in Origen, in Cicero the refutation is based on a distinction of simple and conjoined occurrents and the concept of co-fatedness and is concerned with the first premiss only. There are no signs of a parallel *argument*, as makes up the core of the refutation in Origen.
- (b) The almost literal parallel of the formulation of the argument in the two sources can easily be accounted for without the postulation of one underlying source for the two refutations. Arguments like the Idle Argument were discussed again and again in the philosophical schools and were most likely learned by heart—not a big deal for people who memorized the whole of Homer. Even if this was not so—if one looks at the Mower Argument and its two sources, we have a case where an argument in early Stoic formulation seems to be quoted 'literally' and is then provided with a refutation from a later time and a different school.
- (c) True, but formulated in different ways: in Origen with modal expressions, in Cicero with the 'no *x* without *y*' formula.

<sup>73</sup> It occurs in *SVF* ii. 957 and in *FDS* 1005.

<sup>74</sup> Barnes 1985, 234–5.



- (d) True, the woman example reads like a general version of the Laius example. Still, the examples are not the same and furthermore, the woman example features in a very close context in a (probably Platonist) passage in Plutarch (fr. 15.3).
- (e) Laius occurs in a large number of testimonies on fate, but apart from one vague hint in Diogenianus (Eus. *Praep. ev.* 4.3.12) none of them is connected with Chrysippus, and of the passages quoted in this context only two are undoubtedly Stoic and (at least) two are Middle Platonist.<sup>75</sup>
- (f) Origen was at least equally learned in and fond of Platonism.

Thus our evidence does not suffice to decide whether Origen drew directly from Chrysippus (quoting *verbatim*), or from some later Stoic, or from a Middle Platonist: the fact that the refutations in Cicero and in Origen are actually different arguments speaks perhaps rather against Chrysippus as author. Further reasons for the alternative that Origen may have drawn from a Platonist source are that the Middle Platonists both discussed the Laius oracle, using the same Euripides quotation we have in Origen immediately before the Idle Argument<sup>76</sup> (and which probably *was* introduced to that context by Chrysippus) and that they wrote about the Idle Argument.<sup>77</sup> Finally, the Origen passage as a whole is entirely neutral as regards the—notable—differences between Stoic and Middle Platonic fate doctrine. Thus although the topics discussed in *Against Celsus* II 20 were dealt with by Chrysippus, and the source from which Origen drew must have originally come about in the context of a discussion of a Stoic, possibly the Chrysippean, position, we do not have enough information to claim Chrysippean authorship, or even Stoic.

### 5.2.3 Eusebius, Preparation for the Gospel 6.8.25–38

Although the Idle Argument has survived in no further sources, there is another passage which helps us to understand Chrysippus' refutation of it. This is a section from Diogenianus in Eusebius' *Preparation for the Gospel* (*Praep. ev.* 6.8.25–38), in which Diogenianus quotes and criticizes parts of Chrysippus' second book on fate. It is often taken to deal with a Chrysippean argument pro compatibilism or pro libertarianism.<sup>78</sup> But this

<sup>75</sup> Of the passages quoted by Barnes 1985, n. 24, none gives Chrysippus' view. (For the Oenomaus passage see my note in 6.4.1). Alex. *Fat.* 202.8–204.6 and Oenomaus in Eus. *Praep. ev.* 6.7.23–4 are about the Stoics, and so is presumably Lucian, *Jup. conf.* 13; the source of Maximus of Tyre 13.5 is uncertain. Calc. *Tim.* ch. 153 and Alcinous, ch. 26, are Middle Platonist.

<sup>76</sup> e.g. Alcinous, *ibid.*

<sup>77</sup> See [Plut.] *Fat.* 574e.

<sup>78</sup> Von Arnim puts it in the section *Fatum et liberum arbitrium*, Long/Sedley 1987 in the section 'Moral responsibility'.

is not entirely correct. The passage in fact presents parts of Chrysippus' reply to the objection that fate-determinism leads to idleness.<sup>79</sup>

### 5.2.3.1 Diogenianus' report of Chrysippus' refutation

Diogenianus writes:

(1) ... in the second <book on fate> he <i.e. Chrysippus> tries to solve the absurdities which appear to follow from the principle that everything is necessitated, and which we put down at the beginning; as, for example, that that principle destroys our own readiness to act, which concerns blame and praise and exhortations, and all the things which seem to happen because of our causation.<sup>80</sup> (*Praep. ev.* 6.8.25)

Here Diogenianus tells us first what Chrysippus aimed at in his second book of fate *in general*, namely solving some problems or absurdities which seem to follow from his Fate Principle; these are most probably objections brought forward against Chrysippus', or in general Stoic, theory of fate by some (real or fictitious) opponents.<sup>81</sup> Diogenianus then gives a *particular example* (οἶον) of what problems Chrysippus tries to solve: his theory has been accused of destroying human readiness to act (προθυμία). Readiness to act is of philosophical significance insofar as it is something which originates in human beings themselves and is also essentially connected with all the activities for which human beings are held responsible.

Now, 'readiness to act' (προθυμία), in its primary meaning of 'eagerness', 'zeal', can be understood as having 'idleness' (ἀργία) as its opposite.<sup>82</sup> And indeed, a little later in our passage 'readiness to act' is used along with 'eagerness' (σπουδή) (6.8.29), and 'to be eager' (σπουδάξω) is contrasted with 'to be negligent and lazy' (ἀμελεῖν καὶ ῥαθυμεῖν) (6.8.30). Furthermore, some passages in later texts which deal with the main idea of the Idle Argument explicitly contrast readiness to act (προθυμία) with being 'idle' (ἀργός) and 'idleness' (ἀργία).<sup>83</sup>

'Readiness to act' (προθυμία) and 'eagerness' and 'to be eager' (σπουδή, σπουδάξω) in this context, are often indeterminate between on the one hand 'wanting to act' (used as synonymous with βούλεσθαι), and on the other hand, 'actively pursuing something', or 'making an effort to achieve something'. Philosophically this corresponds to the distinction between having an intention to act (and a capacity to initiate action) on the one

<sup>79</sup> Cf. Sorabji 1980b, 245, Barnes 1985, n. 20, Sedley 1993, 314 n. 13.

<sup>80</sup> (1) ... ἐν δὲ τῷ δευτέρῳ λύειν πευράται τὰ ἀκολουθεῖν δοκοῦντα ἄτοπα τῷ λόγῳ τῷ πάντα καταναγκάσθαι λέγοντι, ἅπερ καὶ ἡμεῖς κατ' ἀρχὰς ἐτίθεμεν· οἶον τὸ ἀναιρεῖσθαι δι' αὐτοῦ τὴν ἐξ ἡμῶν αὐτῶν προθυμίαν περὶ ψόγους τε καὶ ἐπαίνους καὶ προτροπὰς καὶ πάνθ' ὅσα παρὰ τὴν ἡμετέραν αἰτίαν γιγνόμενα φαίνεται.

<sup>81</sup> Ch. 6 deals with some more of these absurdities and Chrysippus' responses.

<sup>82</sup> Note the contrast of ἀργία and προθυμία in *Meno* 81d and 82a.

<sup>83</sup> e.g. *Alex. Fat.* 191.17–23; *Eus. Praep. ev.* 6.6.8–15.

hand and exerting some physical energy in order to start an action on the other. Both things often seem to run into each other, especially as a concept of the will (which is later used in order to refer to the first capacity) was not yet available. Still, in the present passage, there can be no doubt that in the meaning of the terms 'readiness to act', 'eagerness', the element of making an effort is at the very least included.

The objection Chrysippus faced, that the Fate Principle eliminates readiness to act, is therefore just another way of saying that it leads to idleness; and the one argument which claims to prove this is the Idle Argument. Hence it is worth considering the possibility that Chrysippus' attempt at solving the absurdity that the Fate Principle destroys readiness to act is precisely his rebuttal of the Idle Argument. Closer inspection indeed reveals many more similarities between this passage in Eusebius and Chrysippus' refutation as known from Cicero. To continue first with the translation of the passage:

(2) Now, he says<sup>84</sup> in his second book <on fate> that it is obvious that many things happen because of us <but> none the less these are fated along with the administration of the universe.

(3) He uses the following examples: he says that the fact that the garment will not be destroyed is not fated simply but together with the taking care of it; and the fact that someone will escape from the enemy together with his running away from the enemy; and the fact that someone will have children together with his wanting to have intercourse with a woman.

(4) For, he says, as in the following case: if someone said the boxer Hegesarchus will emerge from the fight completely unscathed, it would be absurd if one expected that he would fight with his arms by his side because he was fated to emerge unscathed—for, the one who made the statement said this because of Hegesarchus's excellent guard against the blows; so it is in all other cases.

(5) For many things cannot happen without us wanting <them> to happen and without us contributing the most intense readiness and eagerness to act, since, he says, those things are fated to happen together with this <readiness and eagerness>.<sup>85</sup> (*Praep. ev.* 6.8.26–29)

<sup>84</sup> The four instances of 'he says' (φησί(ν)) in (2), (3), (4), and (5) indicate a close correspondence to Diogenianus' source, i.e. Chrysippus' second book on fate.

<sup>85</sup> (2) φησὶν οὖν ἐν τῷ δευτέρῳ βιβλίῳ τὸ μὲν ἐξ ἡμῶν πολλὰ γίνεσθαι δῆλον εἶναι, οὐδὲν δὲ ἦττον συγκαθεῖμαρθαι καὶ ταῦτα τῇ τῶν ὄλων διοικήσει. (3) κέχρηται τε παραδείγμασι τοιούτοις τισί· τὸ γὰρ μὴ ἀπολείσθαι, φησί, θοιμάτιον οὐχ ἁπλῶς καθεῖμαρτο, ἀλλὰ μετὰ τοῦ φυλάττεσθαι, καὶ τὸ ἐκ τῶν πολεμίων σωθῆσεσθαι τόνδε τινα μετὰ τοῦ φεύγειν αὐτὸν τοὺς πολεμίους, καὶ τὸ γενέσθαι παιδας μετὰ τοῦ βούλεσθαι κοινωνεῖν γυναικί. (4) ὥσπερ γάρ, φησὶν, εἰ λέγοντός τινος Ἡγήσαρχον τὸν πύκτην ἐξελεύσεσθαι τοῦ ἀγώνος πάντως ἀπληκτον ἀτόπως ἂν τις ἤξιον καθιέντα τὰς χεῖρας τὸν Ἡγήσαρχον μάχεσθαι, ἐπεὶ ἀπληκτον αὐτὸν καθεῖμαρτο ἀπελθεῖν, τοῦ τὴν ἀπόφασιν ποιησαμένου διὰ τὴν περιττοτέραν ἀνθρώπου πρὸς τὸ μὴ πλήττεσθαι φυλακὴν τοῦτο εἰπόντος, οὕτω καὶ ἐπὶ τῶν ἄλλων ἔχει. (5) πολλὰ γὰρ μὴ δύνασθαι γενέσθαι χωρὶς τοῦ καὶ ἡμᾶς βούλεσθαι καὶ ἐκτενεστάτην γε περὶ αὐτὰ προθυμίαν τε καὶ σπουδὴν εἰσφέρεισθαι, ἐπειδὴ μετὰ τούτου, φησὶν, αὐτὰ γενέσθαι καθεῖμαρτο.

This passage introduces in (2) the expression ‘to be fated-along-with’ (*συγκαθεμιάρθαι*).<sup>86</sup> The things that happen because of us are fated along with the administration of the universe. ‘Administration of the universe’ is a standard Stoic phrase for the all-embracing activity of Fate or God.<sup>87</sup> The things that happen because of us are those that depend on us, as is clear from a parallel sentence later in the passage in which Chrysippus is reported as saying ‘that which depends on us is encompassed by fate’ (*Praep. ev.* 6.8.33).<sup>88</sup> Thus Chrysippus’ point in (2) is that the things that depend on us are fated-along-with the rest of the world order. They are embedded in the causal nexus which is fate just like everything else. The same idea is expressed in the refutation in Seneca (*Nat. quaest.* II 38.2), where the action of someone’s going to sea is said to be fated-along-with (*adfatum*) the order of fate (*in illo fato ordine*), in which the outcome of the action is fated.

In the subsequent examples in Eusebius, a distinction is drawn between occurrents that are fated simply or in isolation (*καθεμιάρθαι ἀπλῶς*)<sup>89</sup> and occurrents fated together with (*μετά* + genitive) something else. The first three examples (3) are meant to illustrate future occurrents that are fated not simply but together with some activity of the person whose fate is at issue. These activities are obviously the things that happen because of us from the previous sentence (2). The fourth example (4) is adduced in order to illustrate this relation. The relation is that of a future occurrent fated together with some human activity or intentional behaviour prior or simultaneous to it. We can extract from the text two essential features of the occurrents that are not fated in isolation.

First, the relation between the fated occurrent and the action together with which it is fated is that of a necessary condition; so the general formulation in (5): it *cannot* happen *without* us wanting it to happen and making an effort; and also what Chrysippus says about the examples later on in Eusebius: the occurrents are fated only if the relevant action is performed, otherwise they will not obtain (*Praep. ev.* 6.8.34).<sup>90</sup> Second, no doubt is left that the actions which form the necessary conditions of non-simply

<sup>86</sup> The expression may have been used by Chrysippus himself (cf. the ‘he says’ in the sentence in which it occurs, *Praep. ev.* 6.8.26) and was perhaps coined by him.

<sup>87</sup> For Chrysippus see Stob. *Ecl.* I 79.1–2, Plut. *Stoic. rep.* 1050b, Eus. *Praep. ev.* 6.8.8. For the Stoics in general cf. the numerous passages cited in *SVF* iv under *διοικέω*, *διοίκησις*, *διοικητής*, *διοικητικός*.

<sup>88</sup> ... φησί, περιειλημμένου μέντοι τοῦ παρ’ ἡμᾶς ὑπὸ τῆς εἰμαρμένης.

<sup>89</sup> ‘In isolation’ is, I think, the most appropriate translation of *ἀπλῶς* in this context; ‘unconditionally’ would also be possible. Long/Sedley’s ‘absolutely’ carries the wrong connotation, so does ‘unqualifiedly’ which is otherwise often chosen in philosophical contexts. I will stick to the awkward ‘simply’, since it is both adequate and gives the connection to Cicero’s *simplicia*.

<sup>90</sup> See below (6) for a full quotation of the passage.

fated occurrents are fated themselves. This is explicit in the first three examples (3) and in the subsequent generalization (5).

Both these points are paralleled in Cicero and in Seneca (see 5.2.1.4). How do Cicero's conjoined and co-fated occurrents fit in here? There is no correspondence to either term in Diogenianus. For 'conjoined' (*copulatum*), there may have been no Greek term at all. But it seems that Cicero's 'co-fated' (*confatalis*) stands for something like 'fated together with' (*καθεμιάρθαι μετὰ τινος*). Recovering is fated together with calling the doctor, or is co-fated with calling the doctor. Only that in Cicero 'co-fated' is used as a monadic predicate, whereas 'fated together with' is used as two-placed. What looks like a technical term in Cicero, is a verb with a prepositional phrase in Diogenianus.

It should be noticed that Cicero's *confatalis* cannot be the translation of *συγκαθεμιαρ<μένον>* (being fated-along-with)—although this has sometimes been assumed.<sup>91</sup> Neither relation is symmetrical. (The relation 'x is fated-along-with y' is not symmetrical, since if it were, the administration of the universe would have to be fated-along-with the things that depend on us, which makes no sense.) But in Cicero the sick person's recovering is a co-fated occurrent, and it is co-fated with calling the doctor, whereas in Diogenianus, calling the doctor would be the *συγκαθεμιαρμένον* (but note that no such participle occurs in the text), and it is fated-along-with the general world-order.<sup>92 93</sup>

The quoted passage from Diogenianus, (1)–(5), differs from the Cicero passage in that in the generalization (and the woman example) what is given as a necessary condition is not the action itself but the wanting and making an effort (*βούλεσθαι; προθυμίαν τε καὶ σπουδὴν εἰσφέρεισθαι*, *Praep. ev.* 6.8.27 and 6.8.29). This incorporation of wanting and making an effort of will is important. The objection against fate-determinism was that it leads to idleness (Cicero) or destroys *προθυμία* (Diogenianus). This

<sup>91</sup> So e.g. Turnebus 1552 (printed in Bayer's commentary, Bayer 1959), Bayer 1959, den Boeft 1970, 69, Long 1971, n. 33, Long/Sedley 1987, ii. 341.

<sup>92</sup> Although, the second time when *confatalia* is used in Cicero, this could be in Chrysippus' sense of *συγκαθεμιάρθαι*—it allows either interpretation.

<sup>93</sup> A number of other sources have versions of the expression 'being fated-along-with' (*συγκ(α)θεμιαρ . . .*): [Plut.] fr. XV 3 (Stob. *Ecl.* II 8.25), Nem. *Nat. hom.* 109.3, [Plut.] *Fat.* 569f, Plut. *Epit.* 1.27 (DD 322.9), and we have *adfatum* in Sen. *Nat. quaest.* II 38. Seneca and the Plutarch fragment are similar to Chrysippus in Diogenianus: in each of them human activity is said to be fated together with something else. Seneca adduces four parallel cases to the Idle Argument, and Plutarch presents five examples of co-fatedness, one of them the woman-example. Nemesius deals with the claim that along with the actions themselves also the way in which they are performed (and the choice) are fated. [Plutarch] reports a relation of subordination: particular things are fated along with general ones; this is a wholly different idea from Chrysippus'. The occurrence in Plut. *Epit.* I 27 is in fact an emendation by Gercke for *ἀνεμιάρθαι* which would contradict Stoic theory; it, again, makes the things that depend on us (*παρ' ἡμᾶς*) fated-along-with something, and would fit Diogenianus.

objection does not deal with actions *qua* physical changes in the world that are external to the agents, nor does it concern aimless habitual, unreflected, behaviour. Rather, actions are regarded as changes that happen because of us (*παρ' ἡμᾶς*), i.e. they are initiated internally. More precisely, they are the result of *προθυμία*; they are goal-directed, intentional activities.<sup>94</sup> The Idle Argument would prevent action not from the outside, by external force, but internally, via a person's mind. It stifles motivation in that it obstructs my *wanting* to do something and my *making an effort*. Chrysippus' reply in Diogenianus works on this same level. It is my intention and my making an effort that are emphasized as necessary conditions: without my intention and internal effort there will be no action; without the action, the prospective outcome will not occur. Our *προθυμία* is not destroyed by arguments such as the Idle Argument, since *it* is shown to be a necessary condition for the outcomes.<sup>95</sup>

Our passage gives no illustration of occurrents that are fated simply. For more information about them we have to turn to another passage in Diogenianus which also mentions the distinction between simply and not simply fated occurrents: after a lengthy first criticism of Chrysippus, Diogenianus launches a second attack which he begins with another brief paraphrase from Chrysippus:

(6) And from the distinction itself which Chrysippus makes, it becomes obvious that the causation which depends on us is freed from fate: For, he says, that the garment is preserved is fated if you take care of it, and that children come into being <is fated> if you want <to have intercourse>,<sup>96</sup> but otherwise none of this will be.

(7) But we would not ever use such toning downs in the case of things which are determined by fate. We do not say that some human being will die if such-and-such a thing happens and will not die if it does not happen, but that he will die 'simply', even if anything whatsoever would happen which 'in general' favours not dying. Or else, <we do not say> that some human being will not be susceptible to pain, if he does such and such a thing, but that every human being is susceptible to pain 'simply', whether or not he wants to be.<sup>97</sup> (*Praep. ev.* 6.8.34–5)

<sup>94</sup> Cf. the above-mentioned ambiguity or vagueness in the term *προθυμία*.

<sup>95</sup> If the definition of that which happens because of us (*παρ' ἡμᾶς*) following in *Praep. ev.* 6.8.30 towards the end (as 'that which comes true, because of us being eager and working towards an end, or which is not accomplished because of us being negligent and lazy') is Chrysippean, then the use of the phrases *βούλεσθαι* and *σπουδάζειν* also draws the connection between that which happens because of us and fate (cf. 6.3.5 for the Stoic concept of *παρ' ἡμᾶς*).

<sup>96</sup> Cf. the two parallel passages *Praep. ev.* 6.8.27 and 31.

<sup>97</sup> (6) καὶ ἐξ αὐτῆς δὲ τῆς διαστολῆς, ἣν ποιεῖται Χρύσιππος, δῆλον γίνεται τὸ ἀπολελῆσθαι τῆς εἰμαρμένης τὴν παρ' ἡμᾶς αἰτίαν. Καθεύμαρται γάρ, φησί, σωθῆναι θοιμάτιον, εἰ φυλάττοις αὐτό, καὶ παῖδας ἔσεσθαι, εἰ καὶ σὺ βουληθῆις, ἄλλως δὲ μὴ ἂν ἔσεσθαί τι τούτων.

This passage mentions a distinction (διαστολή) drawn by Chrysippus<sup>98</sup> starting from which Diogenianus wants to show up another inconsistency in Stoic doctrine. The only distinction he employs in the following is that between things not fated simply and those which obtain in isolation or 'simply'.

The things which obtain simply feature only in Diogenianus' criticism. None the less, a criterion for what makes them 'simple' can be extracted from that passage (7): It is not the case that they happen only if something else happens but otherwise not; rather, they happen regardless of whether the person involved wants it. The Greek formulation *ἐάν τε βούληται ἐάν τε μή* corresponds to that used in the Idle Argument in Origen and Cicero, and in the subsequent refutations (see above 5.1.1, 5.2.1). So it appears that the criterion for simplicity is the negation of that for co-fatedness in Diogenianus. This is also suggested by the formulation 'we do not say . . . but . . .' in (7). There is, moreover, a close correspondence to the criterion for simple occurrents in Cicero *Fat.* 30, '*p* will obtain whether or not he does something'. Since Cicero assumed that the simple occurrents are fated (at least the one he dealt with), it seems likely that Cicero's simple occurrents correspond to Chrysippus' simply fated occurrents in Diogenianus, and that *simplex res* is Cicero's attempt to denote the occurrents that are fated *ἀπλῶς*. Taking the various points together, it looks as if we have every reason to assume that the Diogenianus passage presents a main part of Chrysippus' refutation of the Idle Argument from his second book on fate.

### 5.2.3.2 How Diogenianus' and Cicero's reports fit together

If this conclusion is correct, we are now faced with the following problem: As the Cicero passage *also* presents Chrysippus' refutation of the Idle Argument, how can these two passages be reconciled? It is conceivable that Chrysippus dealt twice with the objection that fate-determinism leads to inactivity.<sup>99</sup> But this seems unlikely. Cicero's excerpts from Chrysippus should ultimately stem from his works on fate, and those excerpts which *defend* fate-determinism from the second book—which is just the book from

(7) ἐπὶ δὲ τῶν ὑπὸ τῆς εἰμαρμένης προκατελημμένων οὐκ ἂν ποτε ὑποτιμήσει τοιαύταις χρῆσαιμεθαί. Οὐκ οὖν φαμέν τεθνήξεσθαι τινα\* ἄνθρωπον εἰ τόδε τι γένοιτο, ἀλλ' ἀπλῶς τεθνήξεσθαι, κἂν ὅτιοῦν πρὸς τὸ μὴ ἀποθνήσκειν καθόλου γίγνοιτο· ἢ μὴ ἀλγηδόνος ἔσεσθαι δεκτικὸν ἄνθρωπὸν τινα, κἂν ταδί πράττοι, ἀλλ' ἀπλῶς πάντ' ἄνθρωπον ἀλγηδόνος εἶναι δεκτικόν, ἐάν τε βούληται ἐάν τε μή. \*cf. n. 111 below.

<sup>98</sup> διαστολή can also mean something like exposition; in which case the exposition at issue is that of the occurrents that are fated together with something, i.e. of one of the two types of occurrents Chrysippus distinguished. See for use with meaning 'distinction' for Chrysippus: Plut. *Comm. not.* 1079b; for Epicureans: Epicurus, *Nat.* 28.7, and Philod. *Piet.* 95–100 (Obbink).

<sup>99</sup> As has been suggested e.g. by Sharples 1991, 181.

which Diogenianus claims he quotes. The assumption that Chrysippus dealt with the same subject twice in the same book can be no more than a makeshift. On the other hand, the differences between Cicero and Diogenianus are considerable. Even though the philosophical points made seem almost exactly the same, there is no overlap in examples, and only Cicero presents the Idle Argument itself. The proposal that Cicero and Diogenianus drew ultimately from the very same source can, however, be made plausible, if one assumes that they picked out different bits from the source, and that Cicero made some alterations in the examples, something we know he frequently did. One possible structure of the original passage in Chrysippus would be this:<sup>100</sup>

- (a) objection: fate-determinism leads to idleness, destroys readiness to act
- (b) the Idle Argument
- (c) the distinction between simple and non-simple occurrents
- (d) simple occurrents with example(s)
- (e) non-simple occurrents with (at least four) examples
- (f) generalization from the examples
- (g) application to the Idle Argument
- (h) general conclusion ((g) and (h) may have been in reverse order.)

Cicero has (b), (c), (d), (f), (g) and parts of (a) and (e); Diogenianus has a different part of (a), refers to (c) and (d), and has (e), (f), (h). Some of the differences between Cicero and Diogenianus can be more readily explained if one first directs one's attention to the following oddities in the Cicero passage:

First, the Socrates example seems not to fit the criterion for simplicity (5.2.1.2). Second, if one understands the Laius example as based on the story of Laius and Oedipus, it does not quite work as a counter-example to the Idle Argument. The Idle Argument is meant to lead to inactivity. Given that intercourse was seen as a necessary condition for getting a child, one would thus expect an example in which someone who wants a child considers whether or not to have intercourse. But according to the story, Laius desires to have intercourse, but does not want to have a child.<sup>101</sup> Third, remember that the Milo example does not quite succeed as an

<sup>100</sup> Chrysippus' argumentation for the compatibility of determinism and moral responsibility followed a broadly similar structure, see below, Ch. 6.

<sup>101</sup> The only way to use the story in the counter-argument would be like this: 'The argument runs "If you're fated to have a son (even though you don't want one), you'll have one whether or not you have intercourse with a woman. So you may as well have intercourse." But this is absurd, because if you did not have intercourse, you would not have a child.' Here *inactivity* is a *sufficient* condition for the desired outcome, whereas what is expected is that activity is a necessary condition for the desired outcome—as is the case e.g. in all four examples in Diogenianus (above 5.2.3.1 (3)–(4)), in all four examples in Sen. *Nat. quaest.* II 38.1–2, and in all five examples in Plut. (fr. XV 3).



analogy either: it could not lead to idleness, since the thing stated to be conjoined with the fight's taking place, i.e. having an opponent, is not an intentional activity.<sup>102</sup> Fourth, grammatically the Milo example explains the Laius example which in turn is meant to explain by analogy the doctor example. So why not have the Milo example to explain the doctor example directly?

In Diogenianus we find none of these anomalies. There is no illustration of simply fated things; in all examples of co-fated things, human intentional activity is a necessary condition for the desired outcome; the Hegesarchus example features an action; and it is much more detailed than the others and explains, in one go, the three previous examples, a method that makes perfect sense.

The lack of parallelism between the sources and the incongruities in Cicero can be explained as follows: First, Cicero or his source modified the example for simple occurrents into the Socrates example, or introduced the Socrates example (see also below 5.3.1). Second, Cicero (or his source) put the characters of Laius and Oedipus into the woman example—perhaps even taking the example from one of Chrysippus' books on fate, if from a different context.<sup>103</sup> Third, Cicero substituted the Milo example for the Hegesarchus example, perhaps in order to make the relation of necessary condition more striking, perhaps because Milo was a more famous and generally known sports idol, whereas Cicero may never have heard of the Hellenistic wrestler Hegesarchus. The Milo and Hegesarchus passages display a very similar structure:

ut	ὥσπερ γάρ, φησὶν
si esset dictum	εἰ λέγοντός τινος
'luctabitur Olympiis Milon'	Ἡγήσαρχον τὸν πύκτην ἐξελεύσεσθαι τοῦ
	ἀγῶνος πάντως ἀπληκτον
et referret aliquis	ἀτόπως ἂν τις ἡξίου
'ergo sive habuit adversarium	καθιέντα τὰς χεῖρας τὸν Ἡγήσαρχον
sive non habuit, luctabitur'	μάχεσθαι
erraret	

<sup>102</sup> Whereas we have intentional, goal-directed, activity in *all thirteen* examples in the parallel passages; see previous note for the passages.

<sup>103</sup> We know that Chrysippus used the story in his book on fate. (Cf. e.g. Diogenianus in Eus. *Praep. ev.* 4.3.12–13.) Further, the story is discussed immediately before the Idle Argument in Origen (*Cels.* II 20, 340.47–342.61), and the prophecy to Laius became a standard example in later ancient doctrine of fate (5.2.2.2 n. 75), but it occurs nowhere else in the context of the Idle Argument. The woman example, on the other hand, is used in the context of the Idle Argument or its general idea, not only in Diogenianus, but also in Origen and in Plutarch. All the other examples, in Diogenianus, Seneca, Plutarch, Origen are everyday examples, and so is the doctor example itself. This includes the Hegesarchus (or Agesarchus, cf. Pauly Wissowa, s.v. 'Agesarchos') example, for the boxer Hegesarchus (mentioned by Pausanias 6.12.8) was almost a contemporary of Chrysippus—a fact that also makes it very likely that this is Chrysippus' original example.

est enim	ἐπεὶ
copulatum 'luctabitur'	ἄπληκτον αὐτὸν καθεύμαρτο ἀπελθεῖν τοῦ
	τὴν ἀπόφασιν ποιησαμένου
quia sine adversario nulla	διὰ τὴν περιττοτέραν τάνθρώπου πρὸς τὸ μὴ
luctatio est	πλήττεσθαι φυλακὴν τοῦτο εἰπόντος,
Omnes igitur istius generis	οὕτω καὶ ἐπὶ τῶν ἄλλων ἔχει.
captiones eodem modo refelluntur.	

If one assumes that Cicero replaced the Hegesarchus example by the Milo example, the parallel structure becomes obvious and is certainly closer than one would wish to explain by reference to chance. The fourth difficulty just disappears if one assumes that in Cicero's source the Milo-Hegesarchus example was more detailed and served to explain the three preceding examples—as is the case in Diogenianus.

I thus take it as established that the passages from Chrysippus in Diogenianus in Eus. *Praep. ev.* 6.8.25–38 form part of Chrysippus' counter to the objection that his theory of fate leads to idleness. We have then both Cicero and Diogenianus as passages from which to reconstruct Chrysippus' reply to the Idle Argument.

### 5.3 CHRYSIPPUS' REFUTATION: FATALISM VERSUS CAUSAL DETERMINISM

Having sorted out the various sources for Chrysippus' reply to the Idle Argument, we can now go back to some of the residual problems that emerged in the discussion of Cic. *Fat.* 30, and then consider how Chrysippus' refutation is grounded in and helps to shed some light on his theory of fate.

#### 5.3.1 *Simply fated occurrents reconsidered*

First, the reason for the occurrence of two historical examples in the refutation in Cicero (*Fat.* 30), in particular, how the Socrates example fits in, still remains unclear. Recently, an interpretation of the Cicero passage has been suggested in order to solve these difficulties.<sup>104</sup> This interpretation rightly starts out with the assumption that for Chrysippus both simple and conjoined occurrents and the route that leads to them, including all actions, are fated. Simple occurrents are then understood as those occurrents concerning a person which obtain in all possible worlds<sup>105</sup> (they are necessary), although there are non-actual possible worlds in which the

<sup>104</sup> Sedley 1993, 315–19.

<sup>105</sup> The 'possible world' idiom is mine.

person performs different actions before the occurrent obtains. We have 'an intelligently planned network of diverging but ultimately re-converging alternative opportunities'.<sup>106</sup> For Socrates there were possible alternative courses of actions, but the *time of his death* would have been the same, whatever he might have done. The focus on the time of death is explained as a reference to Plato's *Crito* 44a–b, where it is prophesied to Socrates when he will die; and it is stressed that the use of a prophecy here and in the Laius example is non-incidental. Conjoined occurrents are understood as occurrents concerning a person that do not obtain in all possible worlds (they are not necessary); there are non-actual possible worlds in which alternative actions lead to outcomes different from the actual one and the alternative opportunities do not re-converge; for instance, there are possible worlds in which Laius does not sleep with Iocasta and in which no little Oedipus is produced. The picture thus painted is that of a sophisticated version of theories commonly labelled 'fatalist'.

On this reading of the Cicero passage there is no criterion that helps to distinguish between what is a simple occurrent, what a conjoined one, apart from the fact that the divine intelligence *determines*—more or less randomly as far as human knowledge is concerned—that some are simple, others conjoined. This interpretation has the historical advantage of keeping the example for a simple occurrent as it stands. But it seems most unlikely that this can be what *Chrysippus* had in mind when trying to refute the Idle Argument, for the following reasons.

Cicero (*Fat.* 30) reports that Chrysippus used the distinction between simple and conjoined occurrents in order to refute the Idle Argument, and that he understood the doctor example to give a conjoined one. However, on the present interpretation, the choice of the doctor example and of the examples in the parallel passages<sup>107</sup> would seem to be completely random insofar as they could all serve equally as examples for simple occurrents and for conjoined ones. In each case it seems possible that fate, *qua* divine intelligence, has decided that the outcome is necessary. For instance, non-recovery could well be fated simply, because the divine intelligence happened to decide that the person would not recover, and this would be so regardless of whether the disease is in ordinary circumstances fatal. This implies that the specific causal activities of specific objects play no role in this interpretation. In particular, the emphasis laid on human efforts and motivation in Chrysippus' examples for co-fated occurrents and in his general explanation in Diogenianus becomes quite irrelevant: in the absence of prophecies, there is no way for people to find

<sup>106</sup> Sedley 1993, 317.

<sup>107</sup> Sedley accepts the Diogenianus passage as a parallel to the Cicero passage, cf. his n. 13.

out why they should make an effort to run away from their enemy or call a doctor, whereas Socrates should not endeavour to escape from prison. Instead of being an argument against idleness, Chrysippus' answer on this interpretation seems rather to open the door for excuses of the naïve fatalist kind: why should I call the doctor, it may well be fated *simply* that I will die from this disease anyway.

The emphasis on prophecy as a factor that determined the choice of examples is also problematic: the stress on the fact that Socrates knew his time of death seems to disqualify the example as a reasonable case of a sound 'idle argument': both for the applicability and for the efficacy of such arguments it is essential that one does *not* know what is fated. Otherwise it makes little sense to have first *and* second premiss, and a disjunction as third premiss.<sup>108</sup>

So this interpretation cannot explain how the distinction between simple and conjoined occurrents works in the refutation of the Idle Argument. Still, it highlights the fact that the Socrates example and the Laius example, as given by Cicero, are each closely connected with a prophecy, and that this can hardly be a coincidence.<sup>109</sup> Perhaps then at some point after Chrysippus, the distinction between conditional and unconditional prophecies has for some reason been confounded or propped upon Chrysippus' concept of co-fatedness, and thus entered the discussion of the Idle Argument.<sup>110</sup>

But what was Chrysippus' position on simply fated occurrents? I do not think this can definitely be decided. Here are two possibilities: Perhaps there were no examples, and 'simply fated occurrents' just denoted the empty class, since everything is fated together with something. After all, Chrysippus maintains the continuous interdependence of all things and occurrents in time and space, and if something is fated, that means that

<sup>108</sup> Sedley's introduction of moral factors, too, seems irrelevant. In particular, the presumably later Stoic morally correct willingness to comply with fate (cf. 7.3.2–3) that Sedley brings in cannot serve to mark off simple occurrents from conjoined ones: the moral command to comply with fate is not restricted to those occurrents that are *necessary* (as is, for Sedley, Socrates' date of death) but holds for all occurrents, since all occurrents are *fated*, hence also for the case of conjoined occurrents. The point Sedley makes on the relation between climate and the characters in the examples, however apt and interesting, too, seems quite immaterial to the refutation of the Idle Argument. (And why should the divine intelligence put an effort into carefully designing alternative converging opportunities that will never come true?)

<sup>109</sup> This may be confirmed by a passage in Calcidius (*Tim.* 152–3) where, in the context of the Middle-Platonist arguments for that which depends on us, both Socrates (in the context of the decree of the law in *Phaedrus* 248c3–5) and the prophecy to Laius are given in immediate sequence in examples.

<sup>110</sup> Posidonius or Cicero, or any intermediate source could be responsible for this. Note also that fate and prophecy have been mixed up elsewhere in Cicero's *On Fate*, see above, 4.1.5 and 4.2.3 on the passage *Fat.* 11–17.

it has causes and is part of the complex network of causes and occurrents. Thus Chrysippus could have held the view that for every occurrent there are other occurrents (not necessarily actions) that are—causally relevant—necessary conditions for it. This would square with the facts that Diogenianus does not provide any examples for simply fated events, and that we do not find an explicit mention of their existence in his report. But I am slightly hesitant to believe that Cicero (or his source) made up the Socrates example from scratch.

Alternatively, the original example of simply fated occurrents was something like ‘Socrates will die’ or ‘you will die’,<sup>111</sup> and was modified by Cicero or his source.<sup>112</sup> Such examples fit Cicero’s explanation ‘whatever he will do’ (*Fat.* 30) without problems. Simply fated occurrents could then either (i) be those for which *no action* forms a necessary condition; or (ii) more generally those for which no externally induced change is a causally relevant necessary condition. (i) is all that is required for a refutation of the Idle Argument; furthermore, it is for this purpose that Chrysippus seems to have introduced the distinction.<sup>113</sup> How then would simply fated occurrents fit into the Stoic network of causes and occurrents?

At first blush, one could think that simply fated occurrents (like ‘Socrates will die’) are ‘indefinite’, insofar as they contain no determination of time, space, or circumstances; and that because of this one could not say that they are caused (that is, Socrates’ dying in Athens by way of drinking hemlock, etc. is caused, but not Socrates’ dying-fullstop). The point would be that, being more general, they are not part of the ‘network of causes’, which is built up from spatio-temporally definite particulars only. But this suggestion fails since for Chrysippus the fact that simply fated occurrents are fated implies that they have causes. And given that ‘Socrates will die’ is caused, it is caused precisely by an action (or rather by a person, by way of performing that action): if anything, one should think that in the well-known historic case Socrates, by drinking hemlock (or the hemlock, by being drunk by Socrates) was the cause of his death.

<sup>111</sup> Diogenianus, although he does not explicitly present a Chrysippean example for simply fated occurrents, employs Chrysippus’ distinction in his criticism, where he presents two such examples (see above, text (7)). The first is ‘some human being will die’. (I read *τινα*, with ONV, instead of *πάντα*; this makes it parallel to the second example, *Praep. ev.* 6.8.25–38 and to the whole of the passage *Praep. ev.* 6.8.35, which is concerned with individual occurrents (cf. again (7)), and it also fits the immediate context slightly better. But nothing much hinges on this.)

<sup>112</sup> This was a habit of Cicero’s. Cf. for instance ‘Fabius’ in *Fat.* 11–14, see my Ch. 4.

<sup>113</sup> Since it has been shown that the Milo example was substituted by Cicero for the Hegesarchus example, there is no textual reason any more to assume that the criterion concerned occurrents in general that are necessary conditions, rather than actions only. This notwithstanding, the texts of course *admit* the alternative of occurrents.

But if this is so, was not the action of drinking hemlock a necessary condition of Socrates' death? This does not follow. Let us assume that Socrates died of hemlock poisoning. Then the Stoic cause for Socrates' death-by-hemlock-poisoning is Socrates, by drinking hemlock (or the hemlock, by being drunk by Socrates). As Socrates' death-fullstop, since fated, must be caused as well, we would assume its causes to be—at least in part—the same as those of Socrates' death-by-hemlock-poisoning. But whereas taking hemlock is a necessary condition of Socrates' death-by-hemlock-poisoning ('no death by hemlock poisoning without taking hemlock') it is *not* a necessary condition of Socrates' death-fullstop (although it is certainly a sufficient condition). In fact there should be *no* action that is a necessary condition of the occurrent that Socrates dies-fullstop (whereas in the case of conjoined occurrents, there would be at least one human action or externally induced change that is such a necessary condition). In other words, for 'Socrates dies' to obtain in the future no one and nothing has to actively interfere from outside; even if none of the things which might bring people to death prematurely happens to Socrates, he still will die. His being a human, and thus living, being itself is sufficient for that. The cause for his death would in that case be internal. Hence Chrysippus could have all occurrents caused, including simply fated ones; and yet for these latter the criterion for being fated simply is preserved; for there is no *action* (and generally no externally induced change prior to the occurrent) that is a necessary condition.

We have too little information to be able to state what kind of things would turn out to be fated simply. I would suspect that—if they were thought to exist—they were occurrents which are linked with the essence of the object involved. Thus it is for instance part of the essence of human beings that they will eventually die.

### 5.3.2 Co-fatedness and causation

The second unresolved point in the Cicero passage was what kind of relation between *p* and the agent's  $\phi$ -ing was required for co-fatedness.<sup>114</sup> From the examples together with the general information about co-fatedness in our various sources we can extract the following points: the relata of the relation are occurrents or facts. One of them ( $\phi$ -ing) is an action (or some other intentional behaviour that takes an effort on the side of the agent). It is considered a means to attain the other occurrent, as outcome; it obtains

<sup>114</sup> I use 'co-fatedness' here to refer to the—asymmetrical—relation between the agent's  $\phi$ -ing and *p*, which is referred to in Diogenianus as '(*p*) καθεύμαρτο μετὰ τοῦ ( $\phi$ -ing)' and which in Cicero holds between the *confatalis res p* and the occurrent or action  $\phi$ -ing it is co-fated with.

no later than the outcome, and it is a necessary condition of it. Both the action and the outcome are fated, but the relation of co-fatedness is clearly stronger than the mere fact that they are both fated. Finally, since being fated includes being part of the all-embracing causal nexus, and the relation between action and outcome is described as one of co-fatedness, we should expect it not to be conceptual or logical, but in some sense physical or causal.

In Cicero's two examples of co-fated occurrents we had a universal relation of necessary condition (5.2.1.1). No such relation existed in the case of the doctor example, and it remained unclear what made the sick person's recovery co-fated with summoning the doctor. Of Diogenianus' four examples only the woman example implies a universal relation of necessary condition between action and outcome.<sup>115</sup> In Origen we noticed the very same discrepancy as in Cicero: in the parallel example (the woman example) a universal relation of necessary condition holds; in the doctor example it does not.<sup>116</sup> But Origen gives an additional explanation for the necessity of the latter relation:

If the recovering from the disease happens by way of the medical art, the doctor is introduced necessarily. (*Cels.* II 20, 342.79–82)

This proviso, it seems, expresses some kind of causal relation: calling the doctor is a necessary condition of recovery only in those cases in which (the doctor, administering) medical treatment would be a necessary causal factor in the causation that leads to recovery, and—we have to add—consulting the doctor is required to obtain this treatment. Thus, in the case of the doctor example, the action of calling in the doctor would trigger or activate a necessary causal factor of the recovery and nothing else would. Can we infer that causation is a necessary element in the relation of co-fatedness? Since it is uncertain whether Origen reports Stoic doctrine (see 5.2.2.2) we have to turn to Diogenianus for a more definite answer.

The Diogenianus passage allows us to rule out the possibility that the criterion for co-fatedness requires a Stoic causal relation between activity and outcome, or a relation in which the activity triggers a cause of the

<sup>115</sup> The other three examples seem not to involve such a relation. Although it is very unlikely that one comes away from a boxing fight unscathed with one's arms by one's side, if one jumps around and is very fast one might manage to—alternatively one's opponent could be drugged or bribed; and even if one does not run away from the enemy one might occasionally survive; furthermore, some people are so lucky that even if they never take care of their clothes, these still always look like new.

<sup>116</sup> This might be mirrored in the use of  $\epsilon\iota$  in the doctor example and  $\epsilon\pi\epsilon\iota$  (not following CDEH's  $\epsilon\lambda\pi\epsilon\pi$ ) in the woman example: the conditional instead of a causative conjunction is an obvious deviation from the otherwise parallel formulation.

outcome—as was part of the explanation of the doctor example in Origen. Only in the case of the woman example can Stoic causation be assumed: in some cases a man, by having intercourse, causes the fathering of a child. The remaining three examples do not involve an instance of causation triggered by the action. The action does not prompt anything that *actively* brings about the outcome. Staying alive (i.e. not being killed), one's garment being preserved (not being destroyed), remaining unscathed in fight, are not changes that have been brought about by way of the action at issue; rather, in all these cases, certain instances of causation of change seem to have been *prevented* from occurring. A man's running away prevented some enemy from being the cause of his death, etc.

Generally it seems that *either* the actions are necessary conditions of the preservation of a qualitative state (and thus of the absence of some change), by helping to prevent an instance of causation from taking place which would otherwise have taken place, and would have resulted in a change (taking care of the garment; running away; using one's guard); *or* the actions are necessary conditions of the obtaining of a change insofar as they are a necessary part or trigger of an instance of causation by which that change is brought about (calling the doctor, producing a child). If one looks for a common denominator of the examples, what they all share is that the human activity interferes or interacts with the causal nexus of things and occurrents in a way that is causally relevant for the outcome. That is, the action is a necessary condition of an instance of causation to occur or to be prevented.<sup>117</sup>

This tallies well with the early Stoic conception of causation. We have seen in Chapter 1 that this conception is not that of events of a certain type being universally followed by events of another type. Empirically observed regularity and prediction were not an issue of Stoic causal theory, although both these factors were discussed in the context of divination (see 4.2). Rather for the Stoics a cause is a body with a capacity for certain kinds of movements or changes. These will usually be exerted if suitably prompted. However such prompting does not always lead to the movement. There is the possibility that the movement is externally prevented, by interfering elements from the circumstances. In an instance of causation of change<sup>118</sup> the corporeal cause will *actively* contribute to the effect. Thus it must always in principle be possible to single out some body (or several bodies) as causally responsible for the outcome—all the other relevant factors count as circumstances.<sup>119</sup>

<sup>117</sup> The examples themselves may not all seem to express relations of necessary condition, but Chrysippus' general statement about them leaves no doubt about this point.

<sup>118</sup> At present I am only concerned with causation of change. For the difference between causation of change and of qualitative states see above, 1.1.2–3.

<sup>119</sup> For the 'fine-structure' of causation of change see also 6.3.3.



Into this picture, the concept of co-fatedness now brings the concept of causally relevant necessary conditions: Roughly, something<sup>120</sup> is a causally relevant necessary condition of an occurrent *p* if it (i) is a causal occurrent, and (ii) obtains no later than *p*, and (iii) if it did not obtain, nor would *p*. In the cases in which *p* is a change, this means that the causal occurrence is a necessary trigger of an instance of causation of change which leads to *p*; in the cases in which *p* is a qualitative state, this means that the causal occurrence is a necessary preventing factor of an instance of causation of change which would lead to not-*p*. A consequence of the existence of such necessary conditions of occurrents for Chrysippus' determinism is that things are not fated in isolation. For they introduce a restriction on the possible combination of things that can obtain in the course of the world, and hence—because everything is fated—on the combination of things that can be fated. (We do not know whether Chrysippus would consider all such cases of restriction as cases of co-fatedness, or whether his concept of co-fatedness concerns exclusively relations between occurrents and those of their causally relevant necessary conditions that are actions; see 5.3.1.)

I now revert once more to the question of the universality of the relation of co-fatedness. Even if there can be no doubt that the relation between activity and outcome is not universal—is universality an essential factor of co-fatedness in any other way? For instance, there could be a certain subclass of diseases in which medical treatment is—universally—a necessary condition for recovery. And there could be a certain subclass of battles in which running away when attacked is—universally—a necessary condition for survival (in another subclass hiding or giving oneself up might be an alternative). And no doubt, one can always argue that if one limits the situations sufficiently one will find such a restricted-scope universal relation—even if actions of other human beings are involved. Is such a restricted-scope universality pertinent to co-fatedness?

Since we are not looking for conceptual or logical universal relations (see above), what is at issue is whether there are some empirical 'laws of nature' of which the example cases would provide some instantiations. For example, whether whenever a patient displays a certain combination of symptoms, and is treated by a doctor in a certain way, other things being equal, recovery ensues (causal relation of sufficient condition), or whether whenever a patient displays a certain combination of symptoms, and no medical treatment of a certain kind is administered, other things being equal, no recovery ensues (causal relation of necessary condition). The relation of sufficient condition is prevalent in modern determinist

<sup>120</sup> Including conjunctions and disjunctions of things that can obtain.

theories. However, its relevance can be ruled out on the grounds that Chrysippus insists on a relation of necessary condition between action and outcome. Thus the universal relation could in any event only be of necessary condition, or a combination of both. Our text, it seems to me, suggests that in his refutation Chrysippus did not refer to or presuppose any concept of empirically detectable 'laws of nature' or any other type of restricted-scope 'universal relations'. There is no hint that a subclass of comparable diseases or a subclass of comparable battle situations or a subclass of boxing fights came in or was a prerequisite anywhere in the argument. It seems rather unlikely also especially since in some of the examples (Hegesarchus, battle) the outcome is in part dependent on another human being's intentional behaviour.

Suppose that Dio is ill and consults the doctor. It may be that the administered treatment generally makes patients recover as often as not. But it makes Dio recover, and without the doctor he would have died. What matters in the context of the Idle Argument is that in *this* case the doctor *was* needed. Whether there is some universal relation involved, restricted-scope or other, is irrelevant. Of course, this does not preclude the possibility that in that situation given the causes and the whole world state, it was inevitable for the recovery to follow; this is what Chrysippus seems in fact to have believed (1.3). And this may imply—in modern parlance—that there are enormously complex 'laws of nature' that govern whole world states, and which have presumably no more than one instantiation (per world cycle). But for Chrysippus' refutation of the Idle Argument this point is not relevant.

Equally, no universal relation between action and outcome is required to give us sufficient reason to act, and thus to counteract the charge of futility of the Idle Argument. First, it is plainly absurd to ask for a universal relation between the occurrent  $p$  and the action of your  $\phi$ -ing as a prerequisite for your  $\phi$ -ing not to be pointless. But neither is a universal relation of restricted scope required. All that is usually needed is that it is consistent with your other beliefs that your  $\phi$ -ing could be a necessary condition of  $p$  (or rather, that there is a certain epistemic probability that it is a necessary condition), so that if you did not  $\phi$ , not- $p$ , and further that if you  $\phi$ -ed possibly  $p$ , and that nothing else would keep  $p$  from obtaining, as far as you are aware.

For the 'efficiency' of the refutation of the Idle Argument (which after all is applied to particular situations, since actions are particulars), the existence of an empirically accessible, universal relation of necessary condition is not required and no causal theory with universal laws of nature has to be presupposed. For a non-futile action it is sufficient that there is a chance that the action matters for the outcome in that there is a probability that it is a necessary condition for triggering or preventing a prospective cause

from being active and thus furthers a certain envisaged result. And I can see no reason why this should not have been all Chrysippus was after.

### 5.3.3 Chrysippus' refutation and its implications for his determinism

With the help of the passages in Diogenianus, Seneca, and Origen we may have clarified Chrysippus' refutation somewhat. It remains to examine in which way Chrysippus' reply was meant to refute the Idle Argument. The argument, in its general form, was:

- (P1) If it is fated that  $p$ , then, whether or not you  $\phi$ ,  $p$ .
- (P2) If it is fated that not- $p$ , then, whether or not you  $\phi$ , not- $p$ .
- (P3) Either it is fated that  $p$  or it is fated that not- $p$ .
- (C) Therefore (with regard to  $p$ ) it is futile to  $\phi$ .

The analysis of the Cicero passage (above 5.2.1.2) made it clear that Chrysippus' rebuttal was directed *against the first premiss*, (or generally against the premiss in which the relation between the goal-directed activity  $\phi$ -ing and its prospective outcome  $p$  is expressed) in the sense that in the cases in which the outcome  $p$  is co-fated with the action  $\phi$ -ing, the premiss turns out false. In cases in which the outcome is fated simply, and in cases in which neither  $p$  nor not- $p$  is co-fated with  $\phi$ -ing (or not  $\phi$ -ing), the first two premisses would, presumably, be true. The truth of the third premiss is naturally not put in doubt in any of the Stoic texts. In order to avert the consequence of idleness, it is sufficient if in the relevant cases of goal-directed actions, like the doctor example, one of the premisses is recognized as false, or as having a certain probability of being false—regardless of whether the argument is valid.

We do not know whether Chrysippus considered all arguments of the form of the Idle Argument valid. We cannot rule out that he believed that, in addition to the falsehood of the first or second premiss in the relevant cases, there was something else dodgy in the argument, as for instance that it plays on an ambiguity in the phrase 'whether or not you  $\phi$ ,  $p$ ' or in the phrase ' $\phi$ -ing is futile'. We may have to suspend judgement on this point. But—on the assumption that Chrysippus made no logical mistakes—we can extrapolate from his refutation some information about how he himself understood the Idle Argument (which is ambiguous in various ways, see 5.1.4) and about his version of fate-determinism.

In order for Chrysippus' refutation to work, he must have understood the general form of the first premiss in such a way that  $p$ 's being co-fated with your  $\phi$ -ing is inconsistent. And since ' $p$  is co-fated with your  $\phi$ -ing' translates into ' $p$  is fated and your  $\phi$ -ing is a (causally relevant) necessary condition of  $p$ ', we can infer that Chrysippus must have taken the phrase 'whether or not you  $\phi$ ,  $p$ ' to be incompatible with 'your  $\phi$ -ing is a necessary

condition of  $p$ '.<sup>121</sup> This limits the ways in which Chrysippus can have understood that phrase in the Idle Argument. I offer one possible understanding which satisfies the condition that the phrase becomes inconsistent with 'your  $\phi$ -ing is a necessary condition of  $p$ ', and which squares with ordinary language use; there may be others.

The proposition which forms the consequent of the premiss in which the relation between goal-directed activity  $\phi$ -ing and outcome  $p$  is expressed can be taken to imply that there holds no relation of necessary condition between  $\phi$ -ing and  $p$  (see 5.1.4, reading ( $b_2$ )). The consequent can then be rephrased as ' $p$ , even if you don't  $\phi$ ' and read as equivalent to ' $p$  and your  $\phi$ -ing is not a causally relevant necessary condition of  $p$ '. The phrase then implies that it is *possible* that you don't  $\phi$  and  $p$ . On the other hand, Chrysippus' statement ' $\phi$ -ing is a (causally relevant) necessary condition of  $p$ ' can be understood as implying that it is *impossible* that both you don't  $\phi$  and none the less  $p$ . It then follows that 'your  $\phi$ -ing is a necessary condition of  $p$ ' is incompatible with 'whether or not you  $\phi$ ,  $p$ ', since the first implies 'it is impossible that  $p$  and you  $\phi$ ', and the second 'it is possible that  $p$  and you  $\phi$ '. Thus, in all cases in which  $p$  is co-fated with  $\phi$ -ing, the premiss 'If it is fated that  $p$ , whether or not you  $\phi$ ,  $p$ ' turns out false. And since in particular cases such as the doctor example, often we do not know whether  $\phi$ -ing is a necessary condition of  $p$ , and it seems plausible that it is, the conclusion cannot be deduced with certainty, and  $\phi$ -ing cannot be shown to be futile.

This interpretation suggests that Chrysippus did not understand the phrase 'whether or not you  $\phi$ ,  $p$ ' as equivalent to 'if you  $\phi$ ,  $p$  and if you don't  $\phi$ ,  $p$ ' (with material or strict implication in the two conditionals);<sup>122</sup> and hence that he did not read the Idle Argument as an argument about logical determinism.

Note that in order to show the *falsehood* of the premiss in which the relation between goal-directed action and outcome is expressed it is not sufficient just to assume that your  $\phi$ -ing is a necessary condition of  $p$ . This assumption would simply lead to the result that  $p$  is not fated, and hence neither  $p$  nor will you  $\phi$ . For provided this relation of necessary condition is never realized in the world, the premiss could still be true. What is required is the manifestation of such a relation of necessary condition

<sup>121</sup> If 'If it is fated that  $p$ , whether or not you  $\phi$ ,  $p$ ' is incompatible with 'It is fated that  $p$  and your  $\phi$ -ing is a necessary condition of  $p$ ', then 'whether or not you  $\phi$ ,  $p$ ' is incompatible with 'your  $\phi$ -ing is a necessary condition of  $p$ '.

<sup>122</sup> See 5.1.2.3 end and 5.1.4; this is the reading of the phrase which is usually adopted when the Idle Argument is considered as presenting a version of the problem of logical determinism (e.g. Denyer 1981b, 61–3), and one may think that the argument loses some of its attraction if it is not taken in this way. But this did perhaps not hold for the ancients. In any case it is doubtful whether this reading allows one to infer the futility of  $\phi$ -ing; cf. 5.1.4.

in the actual world, as a relation between facts. This is guaranteed by Chrysippus' requirement of co-fatedness, which implies in addition to the fact that your  $\phi$ -ing is a necessary condition of  $p$ , also that  $p$  is fated.

Moreover, the effectiveness of Chrysippus' refutation rests on the assumption that relations of causally relevant necessary condition hold frequently and regularly between goal-directed actions and their prospective outcomes. For this Chrysippus may have been appealing to common sense, using the analogous examples as particularly striking instances of a relation of necessary condition between such occurrents, which also holds in less obvious cases.

There is another important point that suggests that Chrysippus did not deal with the Idle Argument as an argument about logical determinism. For Chrysippus, the principle that if  $p$  is fated,  $p$ , is not a statement about a relation between the present truth of a proposition about a future event, and the future happening of that event, which holds independently of any physical or causal relation in the world. Rather, for Chrysippus, this principle is about a physical or metaphysical power, fate, by which an occurrent  $p$  is determined, and which actively brings about or sustains  $p$  (cf. 2.1.1). Equally he takes the Idle Argument to be about fate as a physical or metaphysical power. 'If it is fated that  $p$  . . .', in the first premiss, is understood as 'If there is a physical power by which  $p$  is predetermined . . .'. Thus fate is in its essence pneumatic power (*δύναμις πνευματική*) that administers the all (Stob. *Ecl.* 79.1–2), and Chrysippus used the phrase 'fated-along-with' in order to express the embeddedness of human actions in fate *qua* administration of the universe (above, 5.2.3.1). And it is on the basis of such a physical concept of fate that Chrysippus shows that the predetermination of some occurrent does not entail that actions commonly seen as contributing to the occurrent's future obtaining are futile. But this does not mean that his refutation works for every theory of fate with a physical concept of fate. Rather, with his reply he shows that *his* fate-determinism does not entail that action is pointless and that his fate-determinism is not a fatalist theory. In this way, at the same time he demarcates his theory from those other theories with a physical notion of fate which are fatalist. Chrysippus' refutation thus enables us to rule out some kinds of fate-determinism as not Chrysippean, and to establish some positive features of his theory.

Formally, Chrysippus' introduction of relations of (causally relevant) necessary condition between occurables restricts the combinations of things that can obtain and can be fated. If your  $\phi$ -ing is a necessary condition of  $p$ , then it is precluded that both you don't  $\phi$  and  $p$ , and equally that both your not  $\phi$ -ing and  $p$  are fated. Chrysippus' introduction of co-fated occurrents provides a restriction on the things that are or can be fated. If  $p$  is not only fated, but co-fated with your  $\phi$ -ing, then your

$\phi$ -ing is fated as well, and hence it cannot be fated that you don't  $\phi$ . Adding to this Chrysippus' assumption that co-fatedness is a common phenomenon in the world, that it is in fact the norm in the case of goal-directed activity, we can rule out that Chrysippus' fate-determinism is of any of the following kinds.

Chrysippus' refutation rules out the possibility that he maintains a theory which claims that every occurrent is fated *and* that all occurrents are fated in complete isolation from each other and hence can in principle obtain independently of each other. Such theories of fate can be consistent. In a world structured and functioning in this way, all arguments of the type of the Idle Argument would be sound,<sup>123</sup> since in this kind of world all occurrents that obtain would be fated simply (they would all be Socrates-will-die type occurrents). For no occurrent would there be another occurrent (and hence no action either) which is prior to it and a causally relevant necessary condition of its obtaining. This squares with the fact that—assuming an action is futile with regard to an occurrent if it is neither a necessary condition of it nor would it contribute in any way to its realization—in this kind of fatalistic world, all actions would indeed be futile. An example of that kind of theory would be: the view that some divine power predetermines every occurrent in isolation or singly. For instance god predetermines singly that to Laius is born Oedipus and that Laius has intercourse, and hence Laius could in principle father a child without intercourse, had god so predetermined.

Chrysippus' refutation also helps to delimit his theory from various theories of partial fate-determinism. The Idle Argument leaves it open whether your  $\phi$ -ing or not  $\phi$ -ing is fated, and may at first sight rather suggest that it is not. One can accordingly conceive of a theory in which the outcomes of human activities are fated, and will happen no matter what, whereas human goal-directed activity generally is not. This type of theory may strike modern philosophers as rather bizarre. However, partial fate-determinism was not uncommon, and a sophisticated modification of such a theory was later championed by the Middle Platonists, who based their view on Plato.<sup>124</sup> Proponents of such theories would have to accept arguments of the Idle Argument type like the doctor example as sound. On the other hand, as we have seen, both Cicero and Diogenianus make it clear beyond doubt that Chrysippus stressed the point that the human activities are just as fated as the outcomes.

Equally, Chrysippus' refutation makes it clear that his determinism is not a theory of two-or-more level determination of occurrents, as e.g. theories that set off fate against nature. For instance, the world may be

<sup>123</sup> If understood along the lines of version (V<sub>1</sub>), see 5.1.4.

<sup>124</sup> See e.g. *Nem. Nat. hom.* 109–10, [Plut.] *Fat.* 570ab, *Calc. Tim.* 152.

in ordinary circumstances fully determined by causal relations, taken as a manifestation of nature, but there exists in addition an extra-worldly power, Fate, who may ordinarily be in agreement with the causal determination in the world, but can at any time annul or override the causal relations. And if it has been predetermined that something will obtain, but the causal goings-on as they are will not bring it about, then Fate will interfere, and make sure that what is predetermined will obtain, even if this undercuts causal relations. Here fate and nature are conceived of as two separate powers, of which, if there is a conflict, fate will always keep the upper hand. In this case again, all Idle Argument type arguments would have to be accepted as sound by proponents of such a theory, since relations of (causal) "necessary" condition between actions and outcomes would be such only conditionally: 'no  $p$  without  $\phi$ -ing *except* if  $p$  is fated, and the normal course of events would not lead to  $p$ '.

These three types of—partial and universal—fate-determinist theories share the features that they are fatalist theories, and that they conceive of fate as some physical power that can exert some influence on the course of events. For all of them arguments of the type of the Idle Argument are sound,<sup>125</sup> and Chrysippus' refutation works for none of them. Hence Chrysippus, with his reply, does not only provide a refutation of the Idle Argument, but at the same time explicates his own universal causal fate-determinism and delimits it from various fatalist theories like the ones above, by making the following three points:

- There hold causally relevant relations of necessary condition among the occurrents in the world.
- Fate is not an extra-mundane power that manipulates or competes with nature or causality in the world, and can override causal relations whenever they do not fit its plan. Instead fate is the entirety of these causal relations. For Chrysippus 'an occurrent  $p$  is fated' means that  $p$  is causally bound into the all-embracing network of causes and occurrents, in that there is a nexus of causes and occurrents which will end up in  $p$ . For Chrysippus the Fate Principle claims that everything is part of this network so that for every occurrent there is a subpart of the causal network that leads to it; and the principle of the unalterability of fate is about the relation between an occurrent's being bound into a whole, complex, network of causes and its eventual obtaining. (This does not at all mean that Chrysippus' determinism is just mechanistic. But the strength of Chrysippus' position is not that it disregards possible mechanical causal connections between occurrents, but that his theory keeps nature's law intact and makes mechanistic and teleological elements coincide.)
- Human action and inaction are just as fated as everything else.

<sup>125</sup> If the argument was understood as (V<sub>2</sub>) or in a similar way, cf. 5.1.4.

Thus the Idle Argument (in Chrysippus' physical rather than logical reading) is successful if invoked against fatalist theories, universal or partial, but fails as an argument against Chrysippus' fate-determinism.

#### 5.3.4 Critique of Chrysippus' refutation

However, Chrysippus' emphasis in his reply on the fact that actions are fated as well as their outcomes, opened the doors for the standard libertarian objection to enter: If these actions are fated, how can they depend on us? how can deliberation about whether or not to act matter? Whereas both Cicero and Origen seem to have approved of the refutations of the Idle Argument they present, and did not add any criticism,<sup>126</sup> Diogenianus launches a lengthy polemic (*Praep. ev.* 6.8.30–9) which basically boils down to the point that if those goal-directed actions are fated, they cannot depend on us, and that by maintaining they do, Chrysippus' theory becomes inconsistent. A similar point is reported by Seneca after his modified version of Chrysippus' reply to the Idle Argument:

'He will escape the danger if he has expiated (by sacrifice, etc.) the misfortune announced by the godhead; but this is also included in fate, that he expiates. Hence he will expiate.' Such things they bring forward against us, in order to prove that nothing remains for our will and that all power of action is given to fate.<sup>127</sup> (*Nat. quaest.* II 38.2–3)

Are these objections to Chrysippus' reply to the Idle Argument justified? As far as Chrysippus' refutation itself is concerned, the answer is 'no'.

<sup>126</sup> Carneades' argument in Cic. *Fat.* 31 is not a reply to Chrysippus' refutation, nor to the Idle Argument; he produces an alternative anti-determinist argument. It is a moot point whether the passage *Fat.* 28–30 was part of Carneades' anti-determinist argumentation (e.g. Barnes (1985) argues that Cicero copied *Fat.* 28–30 directly from Chrysippus, whereas Sharples (1991) assumes that the passage goes back to Carneades), and what his position on the Idle Argument was. He may have understood the Idle Argument as an argument about logical determinism, in line with *Fat.* 17–18 and 26–8 (which would also explain the second version we get of it in *Fat.* 29), and may have pointed out that the present truth of propositions about the future has nothing to do with the relation between events, and that the phrase 'whether or not you  $\phi$ ,  $p$ ' is used in two different meanings in the argument, which is thus fallacious (e.g. along the lines of versions ( $V_4'$ ) or ( $V_5$ ), cf. 5.1.4).

<sup>127</sup> Effugiet pericula, si expiaverit praedictas divinitus minas; ac hoc quoque in fato est, ut expiet; ideo expiabit. Ista nobis opponi solent, ut probetur nihil voluntati nostrae relictum et omne ius faciendi (fato) traditum.

There is a small problem here as to whether in *Nat. quaest.* II 38.1–2 the Stoic, whom Seneca supports, is talking (as 37.3 suggests) or the opponent (as 38.3 suggests). The solution is that the Stoic, like Chrysippus, made the point that actions are fated along with the results, and that the opponent took over this point and turned it against the Stoic. (For Seneca's modified version of Chrysippus' reply cf. above 5.2.1.4.)



Chrysippus introduced the concept of co-fatedness in order to show the falsehood of the first or second premiss of the argument. It is his assumption that relations of (causally relevant) necessary condition hold between actions and outcomes, which allowed Chrysippus to avert the challenge of the Idle Argument and to uphold his fate-determinism. The question whether these actions depend on the agent plays an explicit role neither in the argument nor in the refutation, and the above-mentioned objection is thus irrelevant.

However, I surmise that in his reply Chrysippus intended more than just to refute the Idle Argument, in that at the same time he made an effort to explain how it is possible that everything is fated, in the Stoic sense, and our actions are not futile.<sup>128</sup> Views about what makes an action futile or not futile with respect to an end may of course vary (5.1.4). Chrysippus appears to have made two points in this respect. First, the action is in the control of the agent.<sup>129</sup> Second, the action is, or at least may plausibly be, causally relevant to the end in being a necessary condition of it. These seem to be sufficient conditions for an action not to be futile. To an agent who desires the end, they give sufficient reason to perform the action.

However, even at this point, the objection that if the actions are fated, they cannot depend on the agent applies only indirectly. Chrysippus' goal is to show that his fate-determinism is compatible with purposeful action. For this he *presupposes* that the actions are in the agents' control; but this point is not at issue in his argumentation. This is also basically the answer Seneca gives to the objection:

When this matter will be dealt with <i.e. the problem of how actions can be in our control even though they are fated>, I will say in which way something is in a person's power while fate is upheld; for now, concerning the topic under discussion I have explained how, even if the order of fate is definite, expiations and propitiations may avert the perils of omens, since they do not conflict with fate, but are themselves in fate.<sup>130</sup> (*Nat. quaest.* II 38.3)

<sup>128</sup> This is suggested by Chrysippus' emphasis on the requirement of our readiness and eagerness to act (e.g. Eus. *Praep. ev.* 6.8.29) and its being bound up with fate. Seneca too understands the reply in this way (*Nat. quaest.* 38.3; see below for the passage). Moreover, this is a method Chrysippus employs elsewhere, cf. 6.3 on Cic. *Fat.* 40–2 and Gell. *NA* 7.2.

<sup>129</sup> Diogenianus *ap.* Eus. *Praep. ev.* 6.8.25–6 and 33; cf. Sen. *Nat. quaest.* II 38.3.

<sup>130</sup> Cum de ista re agetur, dicam quemadmodum manente fato aliquid sit in hominis arbitrio; nunc vero id de quo agitur explicui, quomodo, si fati certus est ordo, expiationes procurationesque prodigiorum pericula avertant, quia non cum fato pugnant, sed et ipsae in lege fati sunt.

The last part of the sentence ('et . . . sunt') is corrupt. But the general sense is clear. It must be parallel to 37.3 'sed ipsum quoque in fato est'.

The problem of how it is possible that some things are both fated and depend on us, is dealt with by Chrysippus in the context of a different family of arguments. This part of Chrysippus' theory of fate, in which he explains and defends his compatibilism, is the topic of the next chapter. The refutation of the Idle Argument—like Chrysippus' defence and development of his modal system—does not deal with free-will or moral responsibility directly. Rather, Chrysippus is concerned with rejecting a particular argument and explicating his particular brand of causal determinism, showing that it does not render goal-directed action pointless.

## Determinism and Moral Responsibility: Chrysippus' Compatibilism

In the Chrysippean arguments discussed so far, the issues of freedom and moral responsibility and their compatibility with Stoic determinism have hardly been touched upon, although some of the arguments have secured necessary conditions for responsibility (e.g. the defence of contingency and the reply to the Idle Argument). There are only three sources that attest undoubtedly that Chrysippus, in some way, dealt with the problem of causal determinism and moral responsibility. These are Gell. *Attic Nights* 7.2, Cic. *On Fate* 39–45, Plut. *On Stoic Self-Contradictions* 1055f–1056d.<sup>1</sup> The topics of the three passages are connected. Cicero and Gellius both report what has come to be known as ‘the cylinder analogy’; Plutarch and Cicero each present a Chrysippean distinction of causes in the context of the question of whether assent depends on us, and an argument designed to show that our actions are not necessitated by our impressions. But it is uncertain whether all three passages (or even any two of them) are based on the same Chrysippean work.

Modern commentators generally agree that these passages contain the core of Chrysippus' compatibilism, and that this is the most important part of his doctrine of fate. This is mirrored in the vast literature on the Cicero and Gellius passages.<sup>2</sup> However, there is noticeable disagreement about the points Chrysippus wants to make—concerning both numerous details and the overall intent of his argumentation. Chrysippus comes out variously as a hard determinist, as a soft determinist of this kind or that, or as a libertarian. In addition, it has been suggested that these passages

<sup>1</sup> For Hippolytus, *Haer.* 1.21.2 (*DD* 571.8), Nemesius, *Nat. hom.* 105.12, Oenomaëus in Eus. *Praep. ev.* 6.7.2 and 14, who mention Chrysippus in seemingly related contexts, see below 7.3, 8.1, and n. 158 in 6.4.1 respectively.

<sup>2</sup> So e.g. Bobzien 1997, 76–8, 1998b sections 2–4; Botros 1985, 283–5; Bréhier 1951, 193–6; Dihle 1982, 103; Dobbin 1991, 119; Donini 1974/5, 1988, 31; Duhot 1989, 174–5, 179–80; Forschner 1981, 96–7; M. Frede 1980, 234–6; Görler 1987; Gould 1974, 28–9; Greene 1944, 349; Hankinson 1987, 85; Inwood 1985, 46; Ioppolo 1988, 1994; Kleywegt 1973, 342–3; Long 1968, 340, 1970, 261–2, 1971, 182, 1976, 84; Pohlenz 1959, 105; Reesor 1965, 288–9; Sambursky 1959, 62; Sedley 1993, 322–4; Sharples 1981, 81–97, 1986, 272–3, 1991, 199–200; Sorabji 1980a, 273; Steinmetz 1994, 611; van Straaten 1977, 510–12; Talanga 1986, 132–7; Theiler 1946, 62.

testify that Chrysippus modified his fate theory in later years in order to accommodate human freedom.<sup>3</sup>

My discussion of these passages in this chapter is designed to show that they fit in smoothly with Chrysippus' other arguments, adding to the 'preserved' concepts of contingency and intentional action finally that of moral responsibility—all fully in accord with his theory of causal determinism. More importantly, the chapter seeks to describe the specific problem of moral responsibility and determinism which Chrysippus and his opponents encountered, and to show how it differs from problems that are today subsumed under labels such as 'the free-will problem'. In particular, it will emerge that the conception of moral responsibility of Chrysippus and his contemporaries is not grounded on any concept of freedom to do otherwise, but on the autonomy of the agent. This conception of moral responsibility leads to different problems for its justification within a deterministic system. Based on their theories of causation, of mind, and of decision-making, the Stoics provide a sophisticated solution to these difficulties, showing among other things how it is possible that the rational and moral aspects of human agents can manifest themselves in human actions.

Because of the complexity of the sources and the topic, I start this chapter with some preliminary remarks about the texts (6.1.1) and about Stoic philosophy of mind (6.1.2), before I analyse the arguments which triggered Chrysippus' explication of his compatibilism (6.2), his counter-arguments (6.3.1–2), the cylinder and cone analogy (6.3.3), and a related Chrysippean argument (6.3.4). Section 6.3.5 is devoted to a more systematic exposition of the relation between freedom, autonomy, and moral responsibility in Chrysippus' doctrine, and 6.3.6 deals with the ensuing question of the determination of character. The nature of Chrysippus' compatibilism as defined by the relation between fate, necessity, and antecedent causes is the topic of 6.3.7. In the concluding section (6.4) I discuss some passages which sometimes have been wrongly adduced as evidence for Chrysippus' view on fate and freedom, but which rather present later, tendentious readings of his theory.

## 6.1 SOME PRELIMINARY CONSIDERATIONS

### 6.1.1 *Overview of the central passages*

As stated above, the three passages from Cicero, Gellius, and Plutarch overlap in various ways. This makes a separate and consecutive discussion of the passages an unsuitable way of proceeding. On the other hand,

<sup>3</sup> e.g. Gould 1970, 148–52.

a glance at the extensive literature and its varying results suggests that any 'selective' method, picking the sub-passages that confirm the preferred interpretation and neglecting the rest, is equally inappropriate, since it does not lead to any definitive results. Only an interpretation that does justice to all parts of all three passages can in the end be defended. A consistent interpretation requires further some considerations about the reliability of the sources, and about the precise function of the sections in the respective argumentative context. Accordingly, in this chapter all three passages are considered in their entirety, with sub-passages grouped together according to parallels in argumentation (6.2–6.3.4) before the central questions of moral responsibility, character determination, and the relation between antecedent causes, necessity, and fate are discussed. In order to make the complex interrelations of the three main passages transparent, I begin with a brief overview of their structure, content, and reliability.

#### 6.1.1.1 *Cicero, On Fate 39–45*

The passage in Cicero consists of a long quotation-cum-paraphrase from a work by Chrysippus (*Fat.* 40.2–43),<sup>4</sup> framed by an introduction to and interpretation of this Chrysippean passage (*Fat.* 39–40.1; 44–5). As will become apparent, this 'framework story' is much less reliable than the middle part, since it pursues a certain purpose and interprets Chrysippus' theory in the light of this purpose. This part of the passage is discussed in detail in 6.4.1. The report from Chrysippus has two main sections: First, an argument against Stoic determinism that claims that fate annuls moral and legal accountability (*Fat.* 40.2); this is analysed in 6.2. Second, Chrysippus' reply: a formal counter (*Fat.* 41.2) based on a distinction of causes (*Fat.* 41.1) and followed by a psychological explication of the concept of responsibility that places the origin of responsibility in the faculty of assent, and is illustrated by the cylinder analogy (*Fat.* 42–3); this is the topic of 6.3.

The structure of *Fat.* 39–45 suggests that Cicero drew the passage from one source (cf. 6.4.1) and that the author of the source had a Chrysippean text available from which he copied, and to which he added comments in order to achieve the desired interpretation. The topic of the central passage (*Fat.* 40–3), i.e. the defence of the compatibility of fate and that which depends on us, as well as its general structure, i.e. an objection to Stoic determinism followed by a counter-argument, suggest that the text the source copied from was Chrysippus' second book on fate (cf. Eus. *Praep. ev.* 6.8.25).

<sup>4</sup> How reliable Cicero is in his reports and quotations is controversial. Some useful information about Cicero's method of translation and of adapting Greek terms can be found in Gucker 1995 and in Powell 1995.

## 6.1.1.2 Gellius, Attic Nights 7.2

The passage is the second of two consecutive reports, in two consecutive chapters, from Chrysippus' physics: the first, *NA* 7.1, is a defence of providence which Gellius excerpted from Chrysippus' fourth book *On Providence*. According to Gellius' headers (*capita*), the present passage (*NA* 7.2) presents a Chrysippean argument for compatibilism, namely that he maintains the Fate Principle but holds at the same time that the control of our intention and judgement lies in us. In fact, the passage presents Chrysippus' discussion of the problem of how people can be responsible for their bad actions, although these are fated, and embedded in this discussion is an argument that our judgements and intentions depend on us.

The main part of the passage follows a familiar pattern: a counter-argument to Stoic doctrine is first presented and then—with the help of an analogy—refuted. The overall structure of the passage is:

- Chrysippus' definition of fate (*NA* 7.2.1–3, cf. above 1.4.2)
- an argument against the Fate Principle by opponents to the Stoics (*NA* 7.2.4–5)
- Chrysippus' reply, including an illustration by the cylinder analogy (*NA* 7.2.6–14)
- (a remark on and quote from Cicero's *On Fate* (*NA* 7.2.15))

We do not know how much Stoic text Gellius missed out between the different sections. But, apart from the step from *NA* 7.2.5 to 6, there is no reason internal to the passage to assume that anything substantial was left out.

The two main advantages of Gellius as a source are first, that he is only interested in presenting the doctrine (for entertainment, as it were), with no obvious further, polemical or other (e.g. missionary or harmonizing) end and hence we do not expect the distortions which usually go along with such purposes; second, that Gellius quotes, paraphrases, and summarizes large consecutive bits from an original Chrysippean text (or at least there is no evidence to the contrary). However, these advantages are counteracted by a number of disadvantages:

- Apart from occasional Greek quotations, Gellius translates from Greek into Latin, and his translations are neither always flawless nor sufficiently precise. Often, it is impossible to recover the underlying Greek key terms. (A good example of Gellius' style of translation may be presented in this passage itself, if one compares the Latin 'translation' of the definition of fate (*NA* 7.2.1) with the Greek original (*NA* 7.2.3).)
- The occurrence of *inquit* in Gellius does not guarantee a quotation: 'when "inquit" (as opposed to formulae with "verba" or "haec") accompanies

a sentence in pure Gellianese, cited for content not for form, we have to do with paraphrase, not quotation.<sup>5</sup>

- Gellius' 'compulsive congestion of synonyms'<sup>6</sup> and other stylistic particularities proliferate in our passage and must not be mistaken for original Chrysippeanisms.

These factors make it clear that a rigid word-by-word interpretation of the passage is not a suitable method.

Regarding Gellius' sources, apart from some appended remarks or quotes (added when editing or adding the headings)—like the one from Cicero's *On Fate* in *NA* 7.2.15—Gellius seldom excerpts from more than one work in one chapter.<sup>7</sup> He often, but not always gives the source from which he takes excerpts, and, as a rule, he mentions the author he draws from. There are two plausible alternatives, concerning Gellius' source(s) of our passage: either the whole of *NA* 7.2.1–14 stems from Chrysippus' fourth book on providence, so that Gellius excerpted for two chapters, *NA* 7.1 and 7.2, from one work only; or *NA* 7.2.1–3 comes from this work, but *NA* 7.2.4–14 from Chrysippus' second book on fate. The question cannot ultimately be decided, but one source may here, too, be more likely than two. However, for the following all that matters is the assumption that the bits of Chrysippean theory we obtain from Cicero and Gellius are compatible with each other and concerned with largely the same issue. (Although it seems that Gellius was acquainted with Cicero's *On Fate*, as with most of Cicero's philosophical works, we can rule out the possibility that he took the present passage as a whole from Cicero: Gellius provides material that is lacking in Cicero, and could not plausibly have been lost in one of the *lacunae*, and the terminology differs too much from Cicero's.)

#### 6.1.1.3 *Plutarch, On Stoic Self-contradictions 1055f–1056d*

We can assume that for this passage Plutarch either drew from a Chrysippean work directly, or from a collection of extensive quotations from such a work, or perhaps from his own work on fate, in which, in turn, he would have used either Chrysippus' works or a collection of quotes.<sup>8</sup> In any case, the text is teeming with Stoic technicalities and philosophical terms, and shows detailed knowledge of their doctrine. The passage has been both over- and underrated as a source for Chrysippus' doctrine of fate: overrated insofar as part of Plutarch's criticism has been mistaken as Chrysippean; underrated, since Plutarch has been neglected as a quarry for scraps of Stoic theory, in sections where he criticizes Chrysippus. The general structure of the passage is:<sup>9</sup>

<sup>5</sup> Holford-Strevens 1988, 56.

<sup>6</sup> Ibid. 56, cf. 42.

<sup>7</sup> Ibid. 52–5.

<sup>8</sup> Cf. Babut 1964, ch. 1, for useful information about Plutarch's method and sources in his works on Stoicism. See also *ibid.* 307–16 for the passages on fate.

<sup>9</sup> Donini 1988 provides a detailed analysis of this passage.

- introduction of topic: Chrysippus' theories of impression and fate are inconsistent with each other (1055f, Ἀλλὰ . . . ἐναντιοῦται)
- Chrysippus' argument that impressions are not self-sufficient causes of acts of assent (the Sage Argument, 1055f–1056a)
- Plutarch's dilemma: whether fate is a self-sufficient or a procatactetic (pre-initiatory) cause, either way Chrysippus contradicts himself (1056a–1056d).

The relevance of the passage for our purpose is threefold: (i) it mentions and uses a Chrysippean distinction of causes that is relevant to the question of responsibility (6.3.4); (ii) it contains a Chrysippean argument concerning assent and that which depends on us (6.3.4); and (iii) it has been adduced as evidence for the interpretation that some Stoic(s) took fate to be identical with the antecedent causes of events only (6.4.2).

### 6.1.2 Chrysippus' conception of mind and action

In order to understand Chrysippus' compatibilism, some basic knowledge of the Stoic concepts of soul and mind is indispensable. In this section only a rough outline is presented; some subtleties and difficulties are discussed where they are of relevance later in the chapter.<sup>10</sup>

According to the Stoics, the soul (*ψυχή*) is corporeal, its substance *pneuma*. It consists of eight parts (five senses, procreative part, language part, and ruling part (*ἡγεμονικόν*)). In the case of human beings the ruling part is also called mind (*διάνοια*). It is placed in the heart and encompasses four faculties or powers (*δυνάμεις*): impression (*φαντασία*, *visum*), assent (*συγκατάθεσις*, *adsensio*), impulse (*ὁρμή*, *adpetitio*, *adpetitum*) and intellect (*λόγος*). These four faculties, too, are corporeal, but they are not independent *parts* of the mind and thus do not fill up different places of the heart; rather they are different capacities of the *one* mind, and are interrelated in it 'like fragrance and sweetness in apples' (Stob. *Ecl.* I 368.17–20). They have their specific activities or 'undergoings' (affections) which are referred to with the same Greek terms as the faculties (see below). For reasons of clarity, I refer to the faculties always as faculty (or power) of assent, of impulse, etc. There are slight differences in the psychological theories of the early Stoics and in cases in which different versions can be attributed I confine myself to Chrysippus'.

(When I talk about mental or psychological events, processes, states, etc. in this chapter, I refer to what—according to the Stoics—happens in the mind; of which rational beings are thought to be conscious; and what usually has a sayable (*λεκτόν*) corresponding to it: the propositional impression that *p*, the assenting to *p*, the belief that *p*, the impulse towards

<sup>10</sup> Detailed discussions of the Stoic theory of mind and action can be found in Inwood 1985, Annas 1992, M. Frede 1993.



the predicate  $\phi$ -ing, etc. Ontologically, the Stoics think of mental events and states as movements and states of corporeal entities—just like extramental ones, except that they have *λεκτά* corresponding to them. The modern term ‘intentionality’ may come to mind here.)

*Impressions* are ‘affections’ (*πάθη*) which occur in the soul.<sup>11</sup> They are alterations of the mind (e.g. DL 7.50), i.e. changes or the states resulting from such changes; and they are at least ultimately externally prompted by an underlying object, or parts or qualities, of such an object.<sup>12</sup> When they are stored, they form the memory (SE M 7.373). The impressions of rational beings differ essentially from those of non-rational creatures in that they are rational. That is, their structure is such that they have sayables (e.g. propositions) corresponding to them, and in them the object of the impression can be presented in language (SE M 8.70). In derivation from the propositions, there can be true and false impressions (e.g. SE M 7.243–4).

There are both theoretical and practical or ‘impulsive’ impressions (*φαντασῖαι ὁρμητικαί*). The theoretical ones present things as existing and having certain properties. The impulsive ones present things as to be desired or avoided. Different people may have different impressions when looking at the same object (e.g. wise and non-wise people, experts and non-experts). The impression is thus a function of the external object and the state of our soul. None the less, we have no direct control over which impressions we have or incur.<sup>13</sup> An ‘unbroken’ causal line (which we cannot interfere with consciously and directly) connects the external things and their impressions in our soul (cf. SE M 7.397).

In the case of non-rational animals, the impressions lead quasi-automatically to a response: for instance, if something is presented as desirable, the animal will simply go for it. The impression is followed immediately by an impulse towards activity. In the case of rational beings, there is no such automatic response. Between impression and reaction the activity of the faculty of *assent* is always interpolated. The faculty of assent is the power of either confirming the impression, i.e. giving assent (*συγκατατίθεσθαι*) or withholding such confirmation. In the case of theoretical impressions, the impression suggests to the human being that assent should be given to it (or to the corresponding proposition (*ᾄξιωμα*)); but the human being could in principle withhold assent. In the case of an impulsive impression of something desirable, the impression suggests

<sup>11</sup> *Πάθος ἐν τῇ ψυχῇ γιγνόμενον*, Plut. [*Epit.*] 4.12.1, DD 401.15–17.

<sup>12</sup> *Υποκείμενον κινούν ἡμᾶς; φανταστόν: τὸ ποιοῦν τὴν φαντασίαν*, Plut. *Epit.* 4.12.1–3, DD 401–2; SE M 7.241.

<sup>13</sup> Of course, I can influence what impressions I do or do not have in the sense that I can close my eyes or bend down and look under the bed—but again, this presupposes impressions that make me close my eyes or look under the bed.

that the human being should give assent (to it or to the corresponding predicate, proposition or command)<sup>14</sup> and act accordingly; but again, assent could in principle be refused. (The faculty of reason (λόγος) is involved in order to 'come to a decision' as to whether assent should be given, but an actual process of reasoning is not required for assent.)

In the case that assent is not withheld, a theoretical impression leads the human being to hold a *belief* (ὑπόληψις,<sup>15</sup> δόξα, κατάληψις). If assent is not withheld, and no external hindrances obtain, an impulsive impression leads to (an impulse towards) the actions that realize the desired object or state of affairs. If assent is withheld, no action follows. However, giving and withholding of assent are an asymmetrical pair of activities: to withhold assent from an impulsive impression requires some extra energy and a specific state of tension in the soul; to give assent to it is basically 'to give in', to follow the suggestion of the impression, and does not require a comparable amount of energy.<sup>16</sup>

An *impulse* is a motion of the soul towards something (φορὰ ψυχῆς ἐπὶ τι), in response to an impulsive impression. This motion is brought about by the faculty of impulse. All human impulses are responses to rational impressions. Accordingly, they are called 'rational impulse' (λογικὴ ὁρμή) and defined as a motion of the mind towards something in acting.<sup>17</sup> Rational impulse always involves assent. The sources vary between suggesting that rational impulse actually is assent to a rational, impulsive, impression, and that it accompanies it (more on this point in 6.2.1). If not externally prevented, rational impulse leads to action.

We have little information about Chrysippus' concept of *action*. Action presupposes rational impulse, or assent to a rational impulsive impression and thus essentially differs from mere animal activity. According to Sen. Ep. 113.23, for Chrysippus walking (*ambulatio*) is, physically, pneuma in the ruling part of the soul—contrasted with Cleanthes, for whom it is pneuma that stretches from the ruling part to the feet. If one takes this bit of evidence seriously—and why should one not?—it indicates the emphasis Chrysippus laid on the rational character of action: what makes an action an action is not specific external movements, nor even internal nerve-activities, but what happens simultaneously with these, and controls them, in the mind. This seems quite reasonable, if one considers the possibility that both the external and the inner-bodily movements could be in principle brought about without rationality (someone

<sup>14</sup> The sources allow no definitive answer as to what exactly assent is given to.

<sup>15</sup> Ὑπόληψις sometimes doubles for 'assent'.

<sup>16</sup> The talk of giving positive or negative assent, as if this were basically the same kind of activity seems to be a later development; a corresponding terminology is absent in early sources.

<sup>17</sup> Φορὰν διανοίας ἐπὶ τι τῶν ἐν τῷ πράττειν, Stob. Ecl. II 87.3–5.

else moving a person's arm in a waving movement is different from that person waving), and in most of such cases moral responsibility would not be attributed to the agent.

So we seem to have two types of causal sequences, a theoretical one: object of impression, rational (theoretical) impression, assent, belief; and a practical one: object of impression, rational impulsive impression, assent and rational impulse, action. In both cases the only link that is directly in human control is the assent to the impression, i.e. whether assent is given, or rather withheld and the 'normal' sequence of causation thereby interrupted. Assent is thus the only faculty in the soul to which something like rational, human, impact or responsibility could be attached, and this is reflected in our evidence on fate and moral responsibility. Indirectly, at one remove as it were, rational impulse and—with certain possible restrictions—action are in human control as well.

## 6.2 ANOTHER ARGUMENT AGAINST FATE: FATE RENDERS MORAL APPRAISAL UNJUST

Both Cicero and Gellius report an anti-determinist argument which endeavours to demonstrate that the Fate Principle is incompatible with the assumption that punishment and blame can (often) be justified and which is followed by a reply of Chrysippus. The two reports appear at first sight quite dissimilar. There can, however, be no doubt that they are versions of the same type of argument.<sup>18</sup> We do not know who the originator of this particular anti-determinist argument was, nor whether it was originally directed against the Stoics. Both versions of the argument are introduced as having been presented by a group of philosophers, without mention of a school or a name (*Fat.* 40, *NA* 7.2.4). This suggests that Chrysippus himself stated the argument, as representing a general libertarian objection, before he produced his reply, and that the versions in Cicero and Gellius are ultimately taken from Chrysippus' writings. In Cicero this is confirmed by the remarkable closeness in formulation between the argument and Chrysippus' counter (cf. 6.3.2). In Gellius it finds support in the fact that otherwise one would have to postulate the extremely unlikely situation that Gellius copied from two sources in one chapter (cf. 6.1.1.1).

<sup>18</sup> Variations of this kind of argument have survived in many ancient texts, and at least in later antiquity this argument type had become part of the stock weaponry against determinism. (D. Amand (1945) collected about 50 occurrences of members of this argument family in ancient sources.)

6.2.1 *The argument in Gellius*

After an introductory sentence:

But the authors of other views and philosophical schools protest against this definition <i.e. Chrysippus' definition of fate> in the following way . . .<sup>19</sup>  
(Gell. *NA* 7.2.4)

the argument itself follows:

They say: (1*a*) If Chrysippus believes that all things are set in motion and ruled by fate and that it is not possible for the paths and coils of fate to be bent or transcended, (b) then the sins and misdeeds of human beings, too, should not cause anger or be attributed to themselves and their wills, (c) but to a certain necessity and importunity which arises from fate, which is the mistress and arbiter of all things, <and> through which it is necessary that whatever is going to happen, happens; (2*a*) and because of this the establishing of penalties for criminals by laws is unfair, (b) if human beings do not do evils voluntarily, (c) but are dragged by fate.<sup>20</sup> (*NA* 7.2.5)

This is plainly only a truncated version of the argument. It starts out from the hypothetical assumption that everything is fated, i.e. the Fate Principle<sup>21</sup> and leads, via a number of plausible assumptions to the unacceptable result that legal punishment is unfair. Gellius' presentation is not very well structured. It has a long, strangely placed, account of fate in the middle (1*c*); and the unacceptable consequence (2*a*) is—redundantly—backed up by a variation of the first premiss. Moreover, the final step of the reasoning, comprising the last premiss and the conclusion, is missing.

Here is a tidied up version of the argument, with supplementary premisses and conclusion (I have taken out the two ornate descriptions of fate in (1*a*) and (1*c*), since they are irrelevant for the course of the

<sup>19</sup> Aliarum autem opinionum disciplinarumque auctores huic definitioni ita obstrepunt

<sup>20</sup> (1*a*) Si Chrysippus—inquiunt—fato putat omnia moveri et regi nec declinari transcendique posse agmina fati et volumina, (b) peccata quoque hominum et delicta non suscensenda neque inducenda sunt ipsis voluntatibusque eorum, (c) sed necessitati cuidam et instantiae quae oritur ex fato, omnium quae sit rerum domina et arbitra, per quam necesse sit fieri quicquid futurum est; (2*a*) et propterea nocentium poenas legibus inique constitutas, (b) si homines ad maleficia non sponte veniunt, (c) sed fato trahuntur.

<sup>21</sup> It is the Fate Principle, not the definition of fate that is assumed in the antecedent of the first premiss. However, the confusion of the definition and the principle is quite common. (Von Arnim, for one, does not distinguish them in his section *SVF* ii. *Physica* VI 1 *fati definitiones*.) The confusion becomes understandable from the fact that the Stoics described fate as the active or rational principle which governs the universe as a whole (1.4.1).

argument.<sup>22</sup> I have further left out (2*b*) and (2*c*), as they simply repeat parts of (1*b*) and (1*c*):

- (P1) If everything is fated, then human errors and misdeeds are fated (1*a,c*).
- (P2) If errors and misdeeds are fated, they cannot be attributed to the agents themselves and their wills (1*a,b*).
- (P3) If errors and misdeeds cannot be attributed to the agents themselves, getting angry about them and legal punishments for them are not just(ified) (2,1*b*).
- (P4) [But getting angry about them and legal punishment are just(ified).]
- (C) [Therefore, it is not the case that everything is fated.]

It is evident from the introductory sentence (*NA* 7.2.4) and the antecedent of (P1) that a conclusion like (C) needs to be supplemented. The additional premiss (P4) is the shortest and most obvious way to obtain a valid argument. Stoic ethics would require Chrysippus to accept (P4). (The addition of (P4) and (C) is further supported by the parallel argument in Cicero, which features a comparable last premiss and conclusion (cf. 6.2.1).) The formal structure of the—reconstructed—argument is that of a polysyllogism, concatenated from three Chrysippean second indemonstrables:

- (P1) If P, Q
  - (P2) If Q, not R
  - (P3) If not R, not S
  - (P4) S
- (C) not P

Does this argument present us with a version of the problem of free-will and determinism, as is usually assumed? The philosophically important premisses are (P2) and (P3). According to (P3), it is a necessary condition for (justified) moral indignation and legal punishment that bad actions can be attributed to the agents and their ‘wills’ (*voluntates*), and that the agents act ‘voluntarily’ (*sponte*). According to (P2) the satisfaction of this necessary condition is incompatible with the fatedness of evil actions. What problem the proponents of the argument envisaged thus depends on what they understood by actions ‘attributable to the agents and their wills’ (1*b*) and ‘performed voluntarily’ (2*b*). It is hopeless to seek to recover the exact Greek counterparts to Gellius’ Latin phrases. But it is plausible

<sup>22</sup> At least the second seems added by Gellius himself. He appears to have been fascinated with the Stoic definition of fate; cf. also *NA* 7.2.1–3, 9 (‘naturalis . . . fatum vocatur’), 11 (‘sic ordo . . . necessitas fati’). In *NA* 7.2.9 and 11 these phrases are again irrelevant to the context. As Holford-Strevens 1988, ch. 3, has shown, this indulgence in synonyms is a stylistic habit of Gellius.

to assume that an action fulfils these conditions from (1*b*) and (2*b*) when it depends on us (is ἐφ' ἡμῶν or *in nobis*) or is in our power (*in nostra potestate*). At least this is how Gellius announces the topic of the section in his heading.<sup>23</sup> Our passage provides some hints regarding the concept of that which depends on us employed here. The proponents of the argument presuppose that an action can only either be fated or depend on us (an assumption challenged by Chrysippus in his reply), and the contrast between the two options is elucidated by the description of fate as necessitating future events (1*c*) and working by external force (2*c*, dragging human beings).<sup>24</sup> If an action depends on the agent it is thus not necessitated and not externally forced. There is no mention of free choice or causal undeterminedness of decision-making. The answer to the question of whether, or what sort of, freedom is at issue here will have to await the analysis of further passages.

### 6.2.2 The argument in Cicero

The parallel argument in Cicero runs:

- (1) If everything happens by fate, everything happens by way of an antecedent cause.
- (2) And, if impulse, so too those items which follow impulse, hence also assents.
- (3) And, if the cause of impulse does not lie with us, neither does impulse depend on us.
- (4) But if this is so, those items, too, that are the effect of impulse do not lie with us; therefore neither assents nor actions depend on us.
- (5) From which it follows that neither praise nor blame, nor honours, nor punishments are just.
- (6) Since this is false,
- (7) they believe that it can be concluded persuasively that not everything that happens does so by fate.<sup>25</sup> (*Fat.* 40)

<sup>23</sup> 'How in the same way he (i.e. Chrysippus) both established the power and necessity of fate, and confirmed that none the less the control of our intention and judgement lies in us.' ('Quo itidem modo et vim necessitatemque fati constituerit et esse tamen in nobis consilii iudiciiue nostri arbitrium confirmaverit.')

<sup>24</sup> Cf. 7.3 for the use of this metaphor by other Stoics.

<sup>25</sup> (1) Si omnia fato fiunt, omnia fiunt causa antecedente; (2) et, si adpetitus, illa etiam, quae adpetitum sequuntur, ergo etiam adsensiones; (3) at, si causa adpetitus non est sita in nobis\*, ne ipse quidem adpetitus est in nostra potestate\*; (4) quod si ita est, ne illa quidem, quae adpetitu efficiuntur, sunt sita in nobis; non sunt igitur neque adsensiones neque actiones in nostra potestate. (5) Ex quo efficitur, ut nec laudationes iustae sint nec vituperationes, nec honores nec supplicia. (6) Quod cum vitiosum sit, (7) probabiliter concludi putant non omnia fato fieri, quaecumque fiant.

\* I take the expressions *sita in nobis* and *in nostra potestate* as synonymous, and expressing the same thing as the Greek ἐφ' ἡμῶν (see also 6.3.5). It is clear from (4) that *sita in nobis* cannot mean literally 'placed in us'.

Sentences (1) to (5) appear to be (translated) quotation, (6) and (7) are reported in indirect speech. The assumption to be refuted is the Fate Principle. The general form of the argument can only partly be drawn from the passage. Here is a simplified and preliminary scheme which will have to undergo some modification:

- (1) If  $P$ ,  $Q$
- (2) ?
- (3) If not  $R$ , not  $S$
- (4) If not  $S$ , not  $T$
- (5) If not  $T$ , not  $U$
- (6)  $U$
- (7) 

---

Not  $P$

The argument is vexing in two respects. First, the connection of the premiss in (2) with the premisses in (1) and especially in (3) is rather obscure. As it stands, the argument is not formally valid, and it is hard to believe that it is valid in any sense.<sup>26</sup> Second, there seems to be a discrepancy between the psychological theory employed in the argument and early Stoic psychology as reported elsewhere. (2) and (4) imply that assent follows upon impulse, whereas early Stoic theory assumes either that impulse follows assent, or that impulse and assent to an impulsive impression are one and the same thing (cf. 6.1.2).

Perhaps the argument was simply confused and hence invalid, and perhaps the correct use of Stoic psychology cannot be expected, since the argument is not Stoic, but directed against the Stoics? But things are not that easy. We know that Chrysippus considered the argument valid and sound, provided one makes a certain assumption about the relation between fate and necessity (Cic. *Fat.* 42; cf. 6.3.2). Hence we have to assume that the use of terminology and the psychological assumptions are compatible with, or at least comprehensible within, early Stoic theory, and furthermore, that the original argument had the appearance of validity. I thus propose a reconstruction of the argument which contains only a few, plausible, additions to the text, in order to make it appear valid. There are various ways of doing this, and for the question of determinism and responsibility the differences between them are negligible.

The difficulty raised by the fact that in *Fat.* 40 impulse is positioned before assent admits of no neat solution; but it can be explained

<sup>26</sup> Looking at the general scheme one might expect (2) to take the form

- (2') If  $Q$ , not  $R$  or
- (2'') If  $Q$ ,  $Q_i$ ; if  $Q_i \dots$ , if  $Q_m$ , not  $R$

since this appears to make the original argument formally valid. But (2) clearly does not have the form (2'), and also cannot be pressed into the form (2'') without severe distortion.

satisfactorily for our purposes. We know that there was controversy among the early Stoics about the concepts of impression (e.g. SE *M* 7.228–31) and action (Sen. *Ep.* 113.23). It is hence not surprising that our sources do not present a uniform picture of the nature of impulse either.<sup>27</sup> For instance, Seneca, *Ep.* 113, reports about unconfirmed impulse which happens before assent and has to be confirmed by it. In the argument in Cic. *Fat.* 40 impulse (*adpetitus*) may hence stand for unconfirmed impulse. If one wants to do without the distinction of unconfirmed and confirmed impulse, there is an alternative which is appealing since in the whole passage impressions (*φαντασίαι*) are not once mentioned: Cicero's *adpetitus* could simply stand for the impulsive impression. I prefer this to the previous suggestion. The absence of a mention of impulse as following assent can be explained by the fact that in the context of the argument assent (*adsensio*) is assent to an impulsive impression, which was considered at least by some Stoics as the same as (confirmed) impulse.<sup>28</sup> We then have the sequence (i) external object, (ii) impulsive impression, (iii) assent to the impulsive impression, (iv) action, and the following correspondence between this sequence and Cicero's expressions:

- *causa adpetitus*: the external object (*φανταστόν, ὑποκείμενον . . .*)
- *adpetitus*: impulsive impression (*ὀρμητικὴ φαντασία*)
- *adsensio*: assent to the impulsive impression (*συγκατάθεσις; λογικὴ ὁρμή*)
- *actio*: action (*πράξις*)

My reconstruction of the argument is based on this correspondence of terms, but with minor adjustments it works equally well with the stated alternatives. The argument obtains a valid form, if one adds two premisses, whose truth was uncontested in Hellenistic philosophy, namely:

- (P2) If everything happens by an antecedent cause, the impulsive impression happens by an antecedent cause.

and

- (P4) The antecedent cause of the impulsive impression, i.e. the external object, does not depend on us.

The above-mentioned problem of the missing logical connection between sentences (2) and (3) is solved once one realizes that there is in fact no such connection. Rather, the consequent of the premiss in (2) features only later in the argument, as an implicit conjunct in the antecedent of

<sup>27</sup> This has been pointed out by Ioppolo 1988, 406–8.

<sup>28</sup> Impulse is moved by an impulsive impression, Stob. *Ecl.* II 86.17. Alternatively, (confirmed) impulse may have been skipped in the sequence, since it follows assent automatically, and—in the absence of external hindrances—action in turn follows automatically upon it.



(4). The truth of (3) and (4) is dependent on a general principle that—*prima facie*—has strong plausibility:

- (GP) If something is caused by an antecedent cause which does not depend on us, then it itself does not depend on us.

Here is then the restored and supplemented argument:

- (P1) If everything happens by fate, everything happens by way of an antecedent cause.<sup>29</sup> (1)  
 (P2) [If everything happens by an antecedent cause, the impulsive impression happens by an antecedent cause.]  
 (P3) If the impulsive impression happens by an antecedent cause, that which follows it, i.e. assents [and actions],<sup>30</sup> happens by an antecedent cause. (2)  
 (P4) [The antecedent cause of the impulsive impression, i.e. the external object, does not depend on us.]  
 (P5) If the [antecedent] cause of the impulsive impression does not depend on us, then the impulsive impression does not depend on us. (3)  
 (P6) But if both the impulsive impression does not depend on us, and the impulsive impression is the antecedent cause of assent [and action], then assent and action do not depend on us either.<sup>31</sup> (4)  
 (P7) But if assent and action do not depend on us, then neither blame nor praise, nor honours, nor punishments are just. (5)  
 (P8) But it is not the case that neither blame nor praise, nor honours, nor punishments are just. (6)  
 (C) Therefore, it is not the case that everything that happens does so by fate. (7)

The general form of the argument thus restored is:

- (P1) If P, Q  
 (P2) If Q, R  
 (P3) If R, S  
 (P4) Not T  
 (P5) If not T, not U  
 (P6) If both not U and S, then not V  
 (P7) If not V, not W  
 (P8) Not not W  


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 (C) Not P

<sup>29</sup> For this Chrysippean principle see also below, 6.3.7, and above, 2.1.

<sup>30</sup> Or in full, one may need (P3) and (P3a): If the assent happens by an antecedent cause, that which follows it, i.e. action, happens by an antecedent cause (cf. next note).

<sup>31</sup> This could be short for: (P6a) the impulsive impression causes the act of assent and the impulsive impression does not depend on us; hence the assent does not depend on us either; (P6b) the assent causes the action and the assent does not depend on us (from P6a); hence the action does not depend on us either.

Arguments of this form can be reduced by means of the Stoic *themata* to four first indemonstrables, two second indemonstrables, and one third indemonstrable. Chrysippus would accept premisses (P1)–(P4), (P7), and (P8). In his reply he takes issue with (P5) or (P6) and the underlying general principle (GP) (see 6.3.2).

Comparing Cicero's argument with Gellius', one can see that there are only minor discrepancies. The demonstrandum and the rough structure are the same; and so are the two fundamental points of the arguments: (i) if assent and action are necessitated by fate (in Cicero via antecedent causes), then assent and action do not depend on the agent. (ii) if actions do not depend on the agent, moral appraisal of the agent would be unjust (*iniquus; nec . . . iustae*).<sup>32</sup> This point is the distinctive mark of this particular version of the argument; I could not detect this feature in any of the fifty-odd parallel passages Amand (1945) has collected. Generally, none of them is as close to Cicero or Gellius as those two passages are to each other.<sup>33</sup>

There are, however, some interesting differences. First, Cicero's version comprises positive as well as negative moral appraisal, whereas Gellius dealt with moral indignation and punishment only. The restriction in Gellius becomes comprehensible, if one recalls that Gellius' version may well stem from Chrysippus' *On Providence*. For the prevailing problem connected with providence is how the evil in the world can be explained, given the world is the best possible.

Then, generally, Cicero's version is more technical, larded with elements from Stoic theory of action. Gellius' argument works with a traditional concept of fate, emphasizing its necessitating power and its immutability, and presenting it as a force that externally interferes with human actions. The exact mode of this necessitating interference is left open. By contrast, in Cicero we have the important step from fate-necessitarianism to causal determinism: the whole argument is carried out not with the Fate Principle itself, but with its corollary that everything happens by antecedent causes. What is under scrutiny is the *causal* sequence which stretches from

<sup>32</sup> One would wish that *iustae* was understood to mean 'justified' here, rather than 'just', since 'just' presupposes a moral framework, whereas the argument in fact implies that the moral sphere would be demolished by the assumption of causal fate-determinism. But we do not know whether the authors of the argument were aware of this, nor, of course, what the Greek term was.

<sup>33</sup> Amand 1945, 78–80, gives an exposition of the Cicero passage; he assumes that the author of the argument is Carneades; so does Hankinson 1995, 102. But this must be wrong, since in that case Chrysippus could not have replied to it in his text. Neither mentions the parallel passage in Gellius. Huby 1970, 83–5, attributes the argument to Epicurus, Ioppolo 1988, 420–3, suggests Arcesilaus as the author. My view is that the argument has reached Cicero via Chrysippus, and that there is insufficient evidence for attributing it to a particular philosopher.

the external stimulus via a series of mental events to the extra-mental effect, the action *qua* physical movement of the agent. Necessitation of the action by fate is still the major issue (as is plain from the context in *Fat.* 40 and 42), but it is reduced to the necessitating impact of intra-mental antecedent causes on their effects. The picture of fate externally dragging the agent along with some unexplained crude force has given way to that of externally induced, direct manipulation of the *mind*. The similarities to modern neurophysiological causal determinism are conspicuous.

However, the question whether, or what sort of, freedom was at issue in the argument has to be adjourned once more: the central demand of the proponents of the argument in Cicero is that assent depends on *us* and must not be necessitated by external influence factors. There is no mention of assent being uncaused, nor of free decision between alternatives.

### 6.3 CHRYSIPPUS' REPLY

As in the case of the Idle Argument, Chrysippus seems to have taken the opponent's argument against fate as a starting-point from which to clarify certain aspects of his causal determinism. The main criticism of the argument was that moral accountability is destroyed by fate. Accordingly, Chrysippus' reply combines a formal refutation of the argument (Gell. *NA* 7.2.6–10, Cic. *Fat.* 41–42.1) with an exposition of some points from Stoic psychology in order to determine the fixing point or origin for accountability for actions (Gell. *NA* 7.2.11–12, Cic. *Fat.* 42.2–43).

#### 6.3.1 *Chrysippus' counter in Gellius*

Chrysippus' reply in Gellius is important, since it introduces the fundamental Chrysippean stand that in the determination of human action fate works through human beings, via their character dispositions and beliefs, and hence that fate does not externally force or necessitate human beings to act. Gellius introduces the reply in *NA* 7.2.6:

Against this Chrysippus brings forward many things in a subtle and astute manner, but the meaning of almost everything he has written about this matter is of the following kind . . .<sup>34</sup>

This implies that Gellius thinks that what he presents in *NA* 7.2.7–14 is either representative of Chrysippus' reply in general or the most important part of it. In the first part of the passage Chrysippus questions the

<sup>34</sup> Contra ea Chrysippus tenuiter multa et argute disserit; sed omnium fere quae super ea re scripsit huiusmodi sententia est . . .

opponents' premiss (P2) that if bad actions are fated, they are attributable to fate and not to the agent. Chrysippus' answer is in short that even though everything is fated, bad actions are still attributable to the agents. The main point is made in *NA* 7.2.7:

Although, he says, it is the case that all things are constrained and tied together by fate through a certain necessary and originating Reason, none the less, the dispositions of our minds are subject to fate in such a way as to accord with their characteristic qualities.<sup>35</sup>

Chrysippus singles out as a subclass of all things the dispositions of our minds,<sup>36</sup> and states that they are subject to fate in a particular way, namely 'in such a way as to accord with their characteristic quality',<sup>37</sup> i.e. the quality in which the mental dispositions of human beings differ from one another. The next sentences, *NA* 7.2.8–10, elucidate this:

For if they have been formed through nature initially in a healthy and beneficial way, they transmit all that force which descends upon them through fate from outside in a rather undisturbed and accommodating manner. But if they are uncouth, uneducated, and uncultured, and not supported by any good character qualities, then, even if they are pressed by little or no collision with fated inconveniences, none the less, through their own perversity and voluntary impulse, they plunge into continuous misdeeds and errors.<sup>38</sup> (*NA* 7.2.8)

Chrysippus distinguishes two basic types of 'mental dispositions', and describes how they react to external influences.<sup>39</sup> Morality is the main

<sup>35</sup> Quamquam ita sit, inquit, ut ratione quadam necessaria et principali coacta atque conexa sint fato omnia, ingenia tamen ipsa mentium nostrarum proinde sunt fato obnoxia, ut proprietas eorum est ipsa et qualitas.

<sup>36</sup> *ingenia ipsa mentium nostrarum*. The word *ingenium* occurs three times in Chrysippus' reply in Gellius (*NA* 7.2.7, 10, 11) and is a keyword for the understanding of his argument. I take it that *ingenium* renders the same Greek word each time. On this assumption, the most likely Greek expression is *διάθεσις*, the Stoic word for the characteristic states or dispositions of the human mind. *Διάθεσις* qua mental disposition, fits well in all three cases. (*ingenia mentium nostrarum* could render *διανοίας διάθεσις*.) Moreover, in its second occurrence, *ingenia* is specified by *mala* (10), which fits well with *κακαὶ διαθέσεις* and the fact that for Chrysippus virtues and vices are *διαθέσεις* of the mind (Stob. *Ecl.* II 70.21, DL 7.98).

<sup>37</sup> *ut proprietates eorum est ipsa et qualitas*. I disagree with Long and Sedley's suggestion (Long/Sedley 1987) that the Greek *ἰδία ποιότης* or *τὸ ἰδίως ποῖόν* underlies *proprietates* . . . *et qualitas*. The characteristic qualities of a person's mind are not the same as a person's *ἰδία ποιότης* (individual quality). See below 6.3.3.

<sup>38</sup> Nam si sunt per naturam primitus salubriter utiliterque ficta, omnem illam vim, quae de fato extrinsecus ingruit, inoffensius tractabilisque transmittunt. Sin vero sunt aspera et inscita et rudia nullisque artium bonarum adminiculis fulta, etiamsi parvo sive nullo fatalis incommodi conflictu urgeantur, sua tamen scaevitate et voluntario impetu in assidua delicta et in errores se ruunt.

<sup>39</sup> No sharp distinction is made between the 'mental disposition' of a person and that person. The logical subject in *NA* 7.2.8 should be 'dispositions of the mind' from *NA* 7.2.7, but at the end of *NA* 7.2.8, it seems, the subject switches from dispositions to persons.

distinguishing criterion.<sup>40</sup> If the mental dispositions are healthy and beneficial, the extrinsic influences by fate will not affect them much. If they are uneducated, etc., little or no external impacts will let them do wrong and err.<sup>41</sup> It is the external (*extrinsecus*) circumstances that open up the possibility of immoral action and error, and they are clearly marked out as influences of fate.

This passage, *NA* 7.2.8, makes most sense if one assumes that Chrysippus is thinking in particular of situations of the 'temptation' kind, i.e. situations of need or occasion in which there seems to be some reason for performing bad actions (e.g. poverty for stealing, finding some money in the absence of any witness for keeping it, etc.).<sup>42</sup> These are essentially morally relevant situations—which is to be expected, since the main issue of the whole passage is the punishment of wrongdoers. In such situations, the reactions of the individuals will depend on their mental dispositions to the degree that, confronted with comparable external temptations, people with bad dispositions will succumb, whereas people with healthy dispositions will let the occasion pass. Chrysippus' description of the two types of mental dispositions is not static and about the time of the action only, but includes some theory about the genesis of people's character.<sup>43</sup>

Matters are unnecessarily complicated by the fact that—presumably in order to make his point more striking—Chrysippus introduces a second variable, the strength of the temptation, which may be dubbed the 'temptation factor': this factor is taken as very high in the case of 'good people' in order to show that, even when tempted strongly, they will not give in, and it is taken as very low in the case of 'bad people' in order to show the low threshold for immoral actions in this case. The phrase 'pressed by little or no collision' suggests that external pressure might even be non-existent, once an immoral character has developed.

In *NA* 7.2.8 two fundamental points are made: *NA* 7.2.7 maintained that human mental dispositions are subject to fate depending on their individual quality. *NA* 7.2.8 makes clear that this refers to the fact that a person's actions and reactions to external stimuli are fated in that they depend on the characteristic quality of the person's dispositions at the time of the action. Of importance is secondly the combination of two internal

<sup>40</sup> Cf. Cleanthes' hymn for this thought (see 7.3.1).

<sup>41</sup> For Chrysippus' comparison of the health of soul and body cf. Galen, *PHP* 5.2; for the reaction of the non-wise cf. in particular 5.2.3 and 14 (μικρῶν ἐπιγνομένων αἰτίων).

<sup>42</sup> Cf. Chrysippus, in Galen, *PHP* 4.6.7, for a Chrysippean list of such situations, and in particular 4.6.9–11 and 15, where gold and the beauty of Helen function as external causes for wrong actions. The same type of examples is predominant in later Christian sources (Clement, Origen, Nemesius).

<sup>43</sup> DL 7.89 shows that for the Stoics any such 'perversion' to the bad is due to external factors (διὰ τὰς τῶν ἑξωθεν πραγματειῶν πιθανότητας). The question of character formation and determinism is discussed below in 6.3.6.

determinants of the actions: 'through their own perversity and voluntary impulse'. Bad people's 'perversions' or bad dispositions determine them to act, but do not physically coerce them. The agents act voluntarily, i.e. they are not forced. (The two factors may reflect the phrase 'themselves and their volitions' (1*b*) from the opponents' argument.)

NA 7.2.7 states that the mental dispositions, which are internal to the agents, are subject to fate. NA 7.2.8 mentions fate as an external influence factor on human actions. NA 7.2.9 makes it clear beyond doubt that for Chrysippus fate encompasses factors both external and internal to the agent:

And that this very thing should happen in this way is brought about by that natural and necessary sequence of things which is called fate.<sup>44</sup>

The phrase 'that this very thing should happen in this way' can only refer to the previous sentence, including at least 'through their own perversity and voluntary impulse, they plunge into continuous misdeeds and errors'. The claim is thus that, although a person's reaction is not externally necessitated by fate (not all people would react in that way in such situations of temptation), it is none the less fully determined by fate. Hence fate also works from within or through the agent. The next sentence confirms this:

For it is through its own type fated, as it were, and consequential that <people with> bad dispositions are not free from misdeeds and errors.<sup>45</sup> (NA 7.2.10)

Bad people are fated to perform wrong actions and to make mistakes. And it is their dispositions through which fate works.<sup>46</sup> There is a causal connection between a person's state of character (physically, the tension in their soul-pneuma) and the actions they perform. That this is Chrysippus' view is plain also from Galen, *PHP* 4.6.1–16, where a comparable point is made in a different context.

From the section NA 7.2.7–10 as a whole, the following picture emerges: Take a morally bad action. This action is fated, since all events, including actions, are fated. However, it is not fated 'simply' but by way of a co-operation of two different factors: on the one hand there is fate in its external manifestation (i.e. external to the agents), which presents to the agents a certain 'temptation' which renders a certain (re-)action

<sup>44</sup> Idque ipsum ut ea ratione fiat, naturalis illa et necessaria rerum consequentia efficit, quae fatum vocatur.

<sup>45</sup> Est enim genere ipso quasi fatale et consequens, ut mala ingenia peccatis et erroribus non vacent.

<sup>46</sup> *Genere ipso* refers to one type of the two types of people distinguished: the good and the bad. Cf. Stob. *Ecl.* II 99.3–5, for Zeno and the other Stoics: δύο γένη τῶν ἀνθρώπων εἶναι, τὸ μὲν τῶν σπουδαίων, τὸ δὲ τῶν φαύλων. So also Schroeder (as reported in Sharples 1991, 197).

possible. On the other hand, the agent, like all agents, has certain mental dispositions, and these are also determined by fate. The mental dispositions together with the external stimulation elicit a certain (re-)action which is performed without the agent being externally forced. The reaction—including its moral quality—is thus fully determined by fate, but fate has an internal and an external component. The moral quality of the action is not externally fated but depends on fate as it manifests itself in the agent's dispositions. The psychological details of the co-operation of the external and internal determining factors are further elucidated in the subsequent cylinder analogy and its explanation in *NA* 7.2.11 and *NA* 7.2.12. These sections are dealt with together with Cicero's presentation of the analogy in 6.3.3.

In *NA* 7.2.13 Chrysippus turns to the second part of the opponents' argument:

Because of this he says that people who, being good-for-nothing or lazy, are both harmful and impudent, ought not to be suffered or listened to, when, convicted as guilty of crime, they take refuge in the necessity of fate, as if in the asylum of some temple, and say that their worst actions should be attributed not to their own recklessness, but to fate.<sup>47</sup>

The opponents claimed that if actions are not attributable to the agent (since they are necessitated by fate), then the agent cannot justly be punished. But Chrysippus has shown that the antecedent proposition of this premiss is false. Bad actions are—*although* fated—*nevertheless* due to the agents themselves, and hence people cannot rightly claim that their actions are *not* due to them but due to fate. And hence—it is implied—punishment and the laws which determine them make sense and are not generally unfair.

Chrysippus' reply in Gellius can be assessed as follows: As in the case of the Idle Argument, in his counter-argument Chrysippus marks off his causal fate-determinism from some naïve fatalist doctrine, this time from the position that fate is a necessitating and constraining force external to the agent, either innerworldly, in the form of external stimuli, or as a transcendent, metaphysical, power. The culprit, say Gorgias' Helen, cannot defend herself by saying: 'the external circumstances forced me'. For she acted voluntarily, and it was her on whom the action depended, since someone with different character dispositions might have acted differently

<sup>47</sup> Propterea negat oportere ferri audirique homines aut nequam aut ignavos et nocentes et audaces, qui, cum in culpa et in maleficio revicti sunt, perfugiunt ad fati necessitatem, tamquam in aliquod fani asylum et, quae pessime fecerunt, ea non suae temeritati, sed fato esse attribuenda dicunt.

Cf. 'inducenda sunt . . . necessitati . . . quae oritur ex fato' from the opponents' argument (5) with 'sed fato esse attribuenda.'

in comparable external circumstances. (I come back later<sup>48</sup> to this pattern of argumentation, which instead of arguing that '*She* could have done otherwise', employs the reasoning that '*someone with different mental dispositions* could/would have done otherwise'.) Equally, the culprit cannot justify her action by saying: 'fate, the almighty, all-embracing, power . . . *made me do it*, so I did not do it'. For fate does not work against, despite, external to, or independent of the agent's mental disposition, including her volitions; rather, people's mental dispositions precisely make up part of fate. It seems that according to Chrysippus, someone can rightly say 'I was fated to do this', but could not say 'It was fate which *did* that, hence it was not me who did that,' or 'hence I was forced by fate to do that'. Chrysippus' fate is neither a hypercosmic 'superperson' nor reducible to the external forces and circumstances in the world. Any comprehensive explanation of the action would involve the agent as the immediate and decisive causal factor of the action.

Chrysippus did not understand the opponents' argument as being about free decision or freedom to do otherwise, but as concerned with the question where to locate the responsibility for a human action. His answer is: in the disposition of the agent's mind.

### 6.3.2 Chrysippus' formal refutation of the argument in Cicero

In Cicero the opponents made the transition to criticizing causal determinism, as contrasted with an unspecified universal fatalist theory (6.2.2). They attacked the Fate Principle via its corollary 'Everything happens by an antecedent cause'.<sup>49</sup> In his reply in Cicero Chrysippus in turn defends his Fate Principle via defending this corollary. His refutation of the argument is based on a distinction of antecedent causes. The passage begins like this:

(1) But Chrysippus, since he both rejected necessity and insisted that nothing happens without preceding causes, distinguished kinds of causes, in order that he should both escape necessity and retain fate.<sup>50</sup> (Cic. *Fat.* 41)

This sentence gives us the reason for Chrysippus' distinction. It enables him both to escape necessity and to retain the Fate Principle. More specifically, he purports to reaffirm that if our assents are fated, this does

<sup>48</sup> In 6.3.3 and 6.3.4.

<sup>49</sup> This principle, more often occurring in the form 'every event has an antecedent cause', was used by Chrysippus in the argument given in Cic. *Fat.* 21 and criticized by Carneades in *Fat.* 23, 24, 31, 33. Cf. [Plut.] *Fat.* 574e for a Greek and most probably Stoic formulation.

<sup>50</sup> (1) Chrysippus autem, cum et necessitatem inprobaret et nihil vellet sine praepositis causis evenire, causarum genera distinguit, ut et necessitatem effugiat et retineat fatum.



not entail that they are necessary (their non-necessity being a necessary condition for their depending on us). For this is the claim his opponents attacked in their argument. Chrysippus' distinction of causes is meant to ensure or clarify the compatibility of the principles 'nothing happens without an antecedent cause' and 'not everything that happens is necessary'. The next sentence introduces this distinction.

(2) For, he says, some causes are perfect and principal, others auxiliary and proximate.<sup>51</sup> (*Fat.* 41)

Each type of cause is referred to by two adjectives.<sup>52</sup> The text continues:

(3) Because of this, when we say that everything happens by fate by way of antecedent causes we do not want this understood as by perfect and principal causes, but by auxiliary and proximate causes.<sup>53</sup> (*Cic. Fat.* 41)

Here Chrysippus applies his distinction to antecedent causes. The proponents of the argument in *Fat.* 40, it is implied, treated all antecedent causes (i.e. including those of impulse and assent) as if they were perfect and principal. Chrysippus points out that in the phrase 'everything happens by fate by way of antecedent causes' the Stoics (at least in the context of impulse and assent) understand antecedent causes as auxiliary and proximate only. This clarification of the Stoic position is followed by Chrysippus' formal reply to the argument of the opponents.

(4) Thus he retorts in the following way to the argument which I presented a little while ago: (5) if everything happens by fate, it follows indeed that everything happens by way of preceding causes, but not by perfect and principal < preceding > causes, but by auxiliary and proximate < preceding > causes. (6) If these are not in our power, it does not follow that impulse is not in our power either. (7) But this would follow, if we said that everything happens by perfect and principal < preceding > causes, so that, since these causes are not in our power, neither would impulse be in our power.<sup>54</sup> (*Fat.* 41)

<sup>51</sup> (2) Causarum enim, inquit, aliae sunt perfectae et principales, aliae adiuvantes et proximae.

<sup>52</sup> For the possible origin of these terms see Sharples 1991, 200, and Bobzien 1998b, section 4.

<sup>53</sup> (3) Quam ob rem, cum dicimus omnia fato fieri causis antecedentibus\*, non hoc intellegi volumus, causis perfectis et principalibus, sed causis adiuvantibus et proximis.

\* For the understanding of the phrase *omnia fato fieri causis antecedentibus*, which is important for the relation between fate and antecedent causes, see below 6.3.7.

<sup>54</sup> (4) Itaque illi rationi, quam paulo ante conclusi, sic occurrit: (5) si omnia fato fiant, sequi illud quidem, ut omnia causis fiant antepositis, verum non principalibus causis et perfectis, sed adiuvantibus et proximis. (6) Quae si ipsae non sunt in nostra potestate, non sequitur, ut ne appetitus quidem sit in nostra potestate. (7) At hoc sequeretur, si omnia perfectis et principalibus causis fieri diceremus, ut cum eae causae non essent in nostra potestate, ne ille quidem esset in nostra potestate.

(My addition of 'preceding' in the translation only makes explicit what is implied by the grammatical and argumentational context. It is verified by sentence (9) below.)<sup>55</sup> Sentence (5) repeats premiss (P1) of the opponents' argument (6.2.2)—which they in turn had taken over from the Stoics—and explicates it by specifying that the preceding or antecedent causes in the consequent are proximate causes. (6) conveys the point that it is a consequence of this understanding of the antecedent causes that premiss (P5) of the opponents' argument ('if the cause of impulse does not lie with us, neither does impulse depend on us', *Fat.* 40) is false.<sup>56</sup> The opponents' mistake is that they understand the Stoic statement 'everything happens by antecedent causes' as 'everything happens by perfect and principal antecedent causes'; and a perfect and principal cause is not only itself not in our power, but its effect, since it is completely determined by it, is not in our power either (7).

The next sentence summarizes what Chrysippus thinks he has achieved by his counter-argument, linking up the distinction of causes with the concept of necessity from the introductory sentence in *Fat.* 41, and referring back to the opponents' argument in *Fat.* 40.

(8) Therefore, for those who introduce fate in such a way that they add necessity, the above argument is valid; (9) but for those who will not claim that the antecedent causes are perfect and principal, it is not valid.<sup>57</sup> (*Fat.* 42.1)

We can infer from (8) and (9) that when antecedent causes are perfect and principal, they render their effect necessary, but when they are auxiliary and proximate only, they do not.<sup>58</sup> And since Chrysippus takes them to be auxiliary and proximate only (at least in the relevant cases of impulse and assent) the argument from *Fat.* 40 either does not apply to his theory—namely if it is assumed that all antecedent causes are perfect and principal, as the opponents wrongly do; or the argument is not sound—viz. if it is assumed that there are antecedent causes that are auxiliary and proximate

<sup>55</sup> I assume that there is in this context no difference between preceding (*antepositus*) and antecedent (*antecedens*) cause.

<sup>56</sup> The formulation of (5) and (6) is so close to that of the premisses (P1) and (P5) of the opponents' argument in *Fat.* 40 that I take it to be sufficient evidence for the fact that Chrysippus' refutation is concerned with that argument as presented in *Fat.* 40, and that this argument, too, stems from the same book of Chrysippus. However, note that here in (6) *adpetitus* seems to stand for (confirmed) rational impulse, not for the impulsive impression.

<sup>57</sup> (8) *Quam ob rem, qui ita fatum introducunt, ut necessitatem adiungant, in eos valebit illa conclusio; (9) qui autem causas antecedentis non dicent perfectas neque principales, in eos nihil valebit.*

<sup>58</sup> Later on, in *Fat.* 44–5 perfect causes are referred to as *causae necessariae*. The name does not indicate that these causes are necessary conditions for the effect to come about but that they are necessitating causes or causes that are sufficient to bring about the effect and make it impossible for the effect not to come about.

only, as Chrysippus does. This refutation of the opponents' argument (in *Fat.* 41–2) has of course not proved that impulse or assent is actually in the agent's power. It has only shown that the universal postulation of antecedent causes itself does not rule out that impulse and other things are in the agent's power—namely inasmuch as they are not necessitated by these causes. But Chrysippus' distinction of causes does more, as the next section in Cicero's report shows (see 6.3.3).

### 6.3.3 *The cylinder and cone analogy*

After the refutation of the opponents' argument in *Fat.* 41–42.1, Chrysippus sets out to make us understand how he thinks it is in the agent's power to assent to impressions: i.e. how it is possible that acts of assent (and impulses) happen by antecedent causes without being necessitated by them.<sup>59</sup> For this purpose Chrysippus first employs his distinction of causes to the case of assent:

(1) For when it is said that assents happen by means of preceding causes, Chrysippus believes that he can easily explain how this works. (2) For, even though an assent cannot occur unless set in motion by an impression, none the less, since the assent has this impression as proximate cause and not as principal cause, it has the reason, as Chrysippus holds, which I stated earlier: (3) it is not the case that assent can happen without being prompted by some force from outside—for it is necessary that an assent be set in motion by an impression . . .<sup>60</sup> (Cic. *Fat.* 42.2)

In (3) we are not given the full reason or explanation (*ratio*) Cicero talks about in (2). The full reason includes, of course, the fact that the antecedent causes need not necessitate their effect—as had indeed been stated earlier, in *Fat.* 41–42.1. This point is only made by way of analogy, in *Fat.* 43 (see below).

In the present passage the distinction of causes is used in exactly the same way it was in *Fat.* 41–42.1; i.e. it is applied to *antecedent* causes only. It is denied that the impression is a principal (antecedent) cause. Instead, it is identified as proximate antecedent cause of the assenting, and as a necessary condition of it. Thus assent is not necessitated by its antecedent

<sup>59</sup> *Fat.* 40 announces the topic to be assent, *Fat.* 41 mentions impulse only, *Fat.* 42–3 talks exclusively about assent. This does not mean that these passages discuss different topics. Rather, human impulse may here, as sometimes elsewhere, be treated by the Stoics as a *kind* of assent, namely assent to impulsive impressions (6.1.2).

<sup>60</sup> (1) Quod enim dicantur adsensiones fieri causis antepositis, id quale sit, facile a se explicari putat. (2) Nam quamquam adsensio non possit fieri nisi commota viso, tamen, cum id visum proximam causam habeat, non principalem, hanc habet rationem, ut Chrysippus vult, quam dudum diximus, (3) non ut illa quidem fieri possit ulla vi extrinsecus excitata—necesse est enim adsensionem viso commoveri . . .

cause. There is one new element in Chrysippus' explanation: assent must be prompted by some force *from outside*—a point familiar from Gell. *NA* 7.2.8 (see 6.3.1). The rest of Chrysippus' exposition is given in form of an analogy. Cicero writes:

... but <in order to make this clear> Chrysippus returns to his cylinder and cone, which cannot start moving without being pushed. However, when this has happened, he believes that from then on the cylinder rolls and the cone spins by their own nature. (*Fat.* 42.3)

Thus, he says, just as the person who shoved the cylinder gave it the beginning of its motion, but did not give it its roll-ability, so likewise, an impression, when encountered, will imprint and so to speak stamp its form on the mind, but assent <to it> will be in our power; and, just as was said in the case of the cylinder, being pushed from outside, for the rest it will move by its own power and nature.<sup>61</sup> (*Fat.* 43.1)

Gellius' presentation is very similar to Cicero's:

He <i.e. Chrysippus> then uses an illustration of this point which is quite suitable and witty. He says: just as if you throw a cylindrical stone on an inclining and sloping ground, you have been for it the cause and beginning of its tumbling down, but soon it rolls downwards, not because you still make it to, but since such is the shape it has, and the roll-ability of its form; so, too, the order and reason and necessity of fate prompts the kinds and beginnings of causation themselves, but the impulses of our decisions and thoughts (deliberations?) and our actions themselves are directed by each person's own volition and by the dispositions of our minds.<sup>62</sup> (*NA* 7.2.11)

These passages have elicited countless interpretations, often combined with in-depth observations about Stoic physics and theory of causation. But sufficient consideration is not always given to the fact that what Chrysippus presents is an *analogy*, which, as such, has a particular function in his argument. We are told the function in both authors: In Cicero, its purpose is said to be to explain the role of the proximate, antecedent

<sup>61</sup> ... sed revertitur ad cylindrum et ad turbinem suum, quae moveri incipere nisi pulsa non possunt. Id autem cum accidit, suapte natura, quod superest, et cylindrum volvi et versari turbinem putat.

Ut igitur, inquit, qui protrusit cylindrum, dedit ei principium motionis, volubilitatem autem non dedit, sic visum objectum imprimet illud quidem et quasi signabit in animo suam speciem, sed adsensio nostra erit in potestate, eaque, quemadmodum in cylindro dictum est, extrinsecus pulsa, quod reliquum est, suapte vi et natura movebitur.

<sup>62</sup> Huius deinde fere rei exemplo non hercle nimis alieno neque inlepido utitur. Sicut, inquit, lapidem cylindrum si per spatia terrae prona atque derupta iacias, causam quidem ei et initium praecipitantiæ feceris, mox tamen ille praeceptis volvitur, non quia tu id iam facis, sed quoniam ita sese modus eius et formae volubilitas habet; sic ordo et ratio et necessitas fati genera ipsa et principia causarum movet, impetus vero consiliorum mentiumque nostrarum actionesque ipsas voluntas cuiusque propria et animorum ingenia moderantur.

cause in the case of acts of assent. In Gellius, the analogy is introduced as having the function of illustrating Chrysippus' point (*NA* 7.2.7–10) that external influences do not necessitate actions but that fate works through the agent's nature. In both passages, the example is used as an explanatory analogy. An explanatory analogy works from something taken as generally clear or uncontroversial and relatively easy to understand by the intended audience to something not so clear and easy. It usually serves to illustrate one or a small number of particular points. It would be wrong to expect that every detail on the explanandum level has a parallel on the explanans level or vice versa. In the present case, in both passages a succession of physical events on the level of perceptible everyday objects is employed in order to make comprehensible the non-accessible, non-observable, mental processes that take place in the mind.

This is a method which the Stoics, and especially Chrysippus, employed frequently in their psychology: compare Zeno's open and closed hand used for illustrating the acquisition of knowledge (*Cic. Acad.* II 145), Chrysippus' use of running to illustrate impulse and emotions (*Galen, PHP* 4.2.14–18), and of scales and dice to explicate decision-making (*Plut. Stoic. rep.* 1045b–c, cf. 1.3.2). The cylinder and cone analogy is thus not meant to provide detailed insight into Stoic physics and the movement of solid bodies any more than the running analogy illuminates a theory of bodily movements or the dice/scales analogy a physical theory of chance. In all these cases the subject is psychology. Chrysippus' concern is the elucidation of the motions of the mind, i.e. of certain causal processes in the mind.

This then is what happens on the everyday level: someone pushes a cylinder and a cone, which prompts them to move. Without some such external prompting the bodies could not move. The cylinder then rolls, the cone spins. What is responsible for their rolling and spinning is their nature, which is manifested in their shape or their disposition to move in a particular way.<sup>63</sup>

A full understanding of the example requires recourse to Stoic causal theory (cf. 1.1.2): recall that every instance of causation involves at least three factors: two corporeal entities, one being the cause, the other the body at which the effect takes place; and the effect, which is immaterial and a predicate (*κατηγορημα*), and occurs at the second corporeal. I confine myself to identifying these factors in the case of the cylinder; the case of the cone can be constructed accordingly.

The effect is a movement (*κίνησις*), namely the rolling of the cylinder (or, as a predicate, 'is rolling', predicated of the cylinder). The corporeal

<sup>63</sup> In Gellius the cylinder is thrown on, and rolls down, a slope. Whether we owe this variation to Gellius' imagination or to Chrysippus is uncertain.

object at which the effect takes place is the cylinder. As regards the cause, the schema of causation is complicated by the fact that instead of a single cause two factors cooperate in the production of the effect. First, there is the person who pushes the cylinder, who is corporeal and clearly a cause—as explicitly called so in Gell. *NA* 7.2.11. The second determining factor is the cylinder's nature (*suapte natura*) or shape (*modus eius et formae volubilitas*). This does not mean that this factor and the body at which the effect occurs are the same thing. There is a difference between a body and its nature. The first consists of matter and active principle (which, physically, is *pneuma*); the latter is just the active principle. The nature of an object, being *pneuma*, is thus corporeal itself, and the second determining factor is partly identical with the body at which the effect takes place, i.e. the cylinder.

Is the second determining factor a cause? that is, is the nature of the cylinder a cause of the rolling? It is never called a cause, either in Cicero, or in Gellius. But it satisfies the conditions for something's being a cause as set out in Chrysippus' account in Stobaeus (see above 1.1.2): it is corporeal, and it is a 'that because of which' ( $\delta\iota' \ \delta\omicron$ ), as the Latin ablatives (*suapte natura*, *Fat.* 42, *suapte vi et natura*, *Fat.* 43) attest. Furthermore, it is the factor which is decisive for the quality of the effect. It must hence be a cause of the rolling. (The question in which way it is active is considered below.)

The relation between the two cooperating causal factors in the cylinder analogy on the one hand and Chrysippus' distinction of causes from Cicero *Fat.* 41–2 on the other is a matter of dispute. There is no disagreement regarding the point that the first, external, causal factor is a proximate, and most probably auxiliary, antecedent cause of the rolling. This can in any event be inferred from *Fat.* 42.2, where the *visum* (which is the analogue to the pushing person) is expressly called a proximate cause. The received view is that the second, internal, causal factor (the nature of the cylinder) is a perfect and principal cause of the rolling. As I have shown elsewhere,<sup>64</sup> there is no evidence for this belief, nor for the assumption that perfect and principal causes co-operate with auxiliary and proximate causes in one instance of causation. However, this issue is of minor relevance to the present topic, which is the understanding of the cylinder analogy, and more generally, Chrysippus' view on compatibilism. I shall use the neutral designation 'second causal factor'.

We can now try and draw the analogy. I look at Gellius and Cicero separately, before presenting some general observations. In Gell. *NA* 7.2.11 (quoted above), the four factors involved in the intra-psycho causation can be best identified in combination with the section *NA* 7.2.12,

<sup>64</sup> Bobzien 1998b, sections 2–5.

which is a Chrysippean comment on a quotation from the Pythagorean *Golden Verses*, and is meant to further elucidate the main point of the analogy. This section is a quote from the Greek which Gellius presumably took directly from Chrysippus. To facilitate comparison, I quote the relevant section of *NA* 7.2.11 again, together with it:

so, too, the order and Reason and necessity of fate prompts the kinds and beginnings of causation themselves, but the impulses of our decisions and thoughts and our actions themselves are directed by each person's own volition and by the dispositions of our minds. (*NA* 7.2.11)

He then adduces the following words, which are in accordance with what I have quoted: Because of this it is said by the Pythagoreans also: 'You will learn that human beings have sufferings which they have chosen themselves', for harmful things happen to each of them because of them, that is, they sin and are harmed because of their own impulses and because of their own mental disposition.<sup>65</sup> (*NA* 7.2.12)

In both *NA* 7.2.11 and 12 Chrysippus is expressly concerned with impulse and action. The *effect* in the instance of causation at issue contains, besides 'the impulses of our decisions and thoughts', 'our actions themselves'. This fits the context, since both the opponents and Chrysippus are ultimately concerned with the blameworthiness of *actions*. The *body at which the effect takes place* is either the agent ('each *person's* own volition'), or the agent's mind ('mental dispositions') that is, we have the same vagueness as in *NA* 7.2.8 (cf. 6.3.1). The *first causal factor* is circumscribed as 'the order and reason and necessity of fate',<sup>66</sup> which is unlikely to mean that the order, etc. of fate as a whole is the proximate cause. Rather it should refer to the fact that this causal factor is not in our control (cf. Cic. *Fat.* 41). The *second causal factor*, 'by each person's own volition and by the dispositions of our minds' corresponds to the cylinder's shape and roll-ability of form. In *NA* 7.2.12 it is reflected in 'because of their own impulses and because of their own mental dispositions'. We thus

<sup>65</sup> Infert deinde verba haec his quae dixi congruentia: Διὸ καὶ ὑπὸ τῶν Πυθαγορείων εἶρηται· "Γνώσει δ' ἀνθρώπους αὐθαίρετα πῆματ' ἔχοντας", ὥς τῶν βλαβῶν ἐκάστοις παρ' αὐτοῦς\* γινομένων καὶ καθ' ὁρμὴν αὐτῶν ἀμαρτανόντων τε καὶ βλαπτομένων καὶ κατὰ τὴν αὐτῶν διάνοιαν καὶ <διά>θεσιν\*\*.

\* It seems preferable to read παρ' αὐτοῦς with V instead of παρ' αὐτοῖς in order to get a (common) phrase for that which happens because of us—perhaps as paraphrase of the αὐθαίρετα in the quote.

\*\* θέσιν certainly needs emendation. Διάθεσιν, with Usener, seems most promising. Διάνοια should not mean something like purpose, as it is usually translated (e.g. Long/Sedley 1987), but is used in its sense synonymous to ἡγεμονικὸν ψυχῆς, as often used by Chrysippus (see above); κατὰ . . . διάνοιαν καὶ διάθεσιν (or διανοίας διάθεσιν?) then means something like: in accordance with their mind, that is, their particular mental disposition.

<sup>66</sup> This also sounds much like Gellius indulging again in synonyms for fate.

have, for the third and fourth time, the same combination of an element of volition and an element of the dispositions or moral character of the agent (*NA* 7.2.4 and 8 before). I take it that the volitions (in *NA* 7.2.11) and impulses (in *NA* 7.2.12) are emphasized to be the agent's own, since they result from the agent's mental dispositions, so that it is the nature or disposition of the person's mind, as it manifests itself in the impulses, which justifies the attribution of responsibility to the agent. (In Gellius' example, this is a vicious disposition.)

In Cicero, the step from the rolling cylinder and spinning cone to the mental processes in the soul is much clearer than in Gellius. However, there are a couple of difficulties, which concern three out of the four factors involved. The only straightforward factor is the effect: in the soul the effect is an act of assent (*adsensio*); it corresponds to the rolling (*Fat.* 43.1, quoted above).

The problem with the first causal factor—which corresponds to the person pushing the cylinder—is this: It is Cicero's *visum* (translated above by 'impression'), as is confirmed by the use of *visum* three times in *Fat.* 42.2. *Visum* here clearly does not refer to the mental faculty of impression, but to an instance of an impression.<sup>67</sup> Still, Cicero is rather unclear as to what the first causal factor is, and seems to waver between the intramental impression and the external object which induces the impression (*ὑποκείμενον, ὑπάρχον, φανταστόν*). *Extrinsecus pulsa* suggests an external object as cause. (But *extrinsecus* could also simply mean 'externally induced'.) *Visum obiectum* (*Fat.* 43) could be either the external object (*φανταστόν*) or the impression one encounters. (I prefer the latter.) *Commota viso, visum proximam causam habeat* and *viso commoveri* (*Fat.* 42) on the other hand point to the impression itself. That the cause is the impression is supported by the fact that in *Acad.* I 40 Cicero explicitly translates *φαντασία* as *visum*, and by the parallel in Plut. *Stoic. rep.* 1055f (see 6.3.4).<sup>68</sup>

The next problem concerns the body at which the effect takes place. The relevant clause is:

an impression, when encountered, will imprint and so to speak stamp its form on the mind, but assent <to it> will be in our power; and, just as was said in the case of the cylinder, being pushed from outside, for the rest it will move by its own power and nature. (*Fat.* 43.1)

<sup>67</sup> As the impression is an occurrent and as such strictly speaking not corporeal for the Stoics, (being either a change or a qualitative state of the ruling part of the soul), it cannot be a cause, and we must substitute the correspondingly altered part of the ruling part of it.

<sup>68</sup> The difference is not trivial. For the Stoics do not consider the impression simply as an 'objective' imprint of the external object. Impressions are themselves functions of the external objects and the perceiving person's nature (6.1.2). However, this point is irrelevant to the purpose of the analogy.



Cicero's wording forces us to take 'it' (*ea*) in the last clause to refer to assent (*adsensio*), so that we obtain 'being pushed from outside, for the rest, *assent* will move by its own power and nature.' But that makes no sense, because when first mentioned, assent is the incorporeal effect (an act of assent) analogous to the rolling, whereas in the last clause of the quote it must be a body, which has a nature, because it is the analogue to the cylinder. So clearly something is wrong or at least imprecise in the text. I propose that the analogue to the cylinder is the person's mind. This is suggested by the beginning of the clause,

an impression, when encountered, will imprint and so to speak stamp its form  
on the mind . . .

where 'mind' is used analogously to 'cylinder'. The confusion of 'assent' for 'mind' in Cicero could have come about as follows: Cicero seems to have translated the passage at issue (*Fat.* 43.1) fairly literally, as the inserted 'he (Chrysippus) says' (*inquit*) at the beginning of the sentence suggests. Cicero then simply misidentified a feminine singular pronoun: in Greek *διάνοια* (mind) and *συγκατάθεσις* (assent) are both feminine, but in Latin, *animus* (mind) is masculine, whereas *adsensio* (assent) is feminine. We only have to assume that in Chrysippus' original text the Greek for '*ea*' (it) in the last clause was a cross-reference to *διάνοια*, not to *συγκατάθεσις*, whereas Cicero took it as a cross-reference to *συγκατάθεσις*, i.e. *adsensio*, instead of—as he should have—taking it as cross-reference to *animus* and translating it by '*isque*'. Had Cicero correctly translated, the sentence would have read:

an impression, when encountered, will imprint and so to speak stamp its form  
on the mind, but assent <to it> will be in our power; and, just as was said in  
case of the cylinder, being pushed from outside, for the rest *the mind* will move  
by its own power and nature.

The third difficulty, finally, concerns the second causal factor. It corresponds to the nature of the cylinder, and Cicero refers to it as 'the power and nature' (*vi et natura*) of the mind. This power and nature of the mind should be the same thing as Gellius' dispositions of our minds (*NA* 7.2.11). Chrysippus cannot mean the generic nature in which all adult human beings share, but must intend the individual nature of a person's mind, in the sense that it differs from one human being to the other. There is general agreement on this point. However, opinions differ widely as to what this individual nature is, and how it functions as the second causal factor. Thus it has been identified as the cohesive cause (*συνεκτικὸν αἴτιον*) of the assenting, and with the individual quality (*ἰδίᾳ ποιότης*) of the person, as well as with a temporarily changed nature of the mind as opposed to an enduring, stable nature of the mind.

For an evaluation of the various suggestions we need to address the question how we have to envisage the cooperation of the two causal factors. This issue is usually tackled from the side of the rolling cylinder—as was surely intended by Chrysippus. But it was presumably not intended by him that the interpretations should develop into subtle and complex theories about the movement of solid bodies in Stoic physics. For the point(s) of comparison of the analogy must be essential for what happens in the mind, and should be readily identifiable on the explanans level of the analogy. I shall approach this question with an eye to both levels of the analogy, and shall try to sort out which of the physical details on the side of the cylinder and cone are germane to Chrysippus' purpose.

First, it is worth keeping in mind that the two causal factors are causes of the same effect, and that the effect is a movement or change (*κίνησις*). The whole idea of co-operation is lost, if an interpretation of the analogy comes up with two effects, each of which has one of the causal factors as its cause. But even though they are both causal factors of the same effect, their active contribution to that effect differs. Both our texts—for all their differences—are quite specific about the contribution each causal factor makes: the first factor prompts the motion; the second factor is responsible for the rest. In order to see what the rest amounts to, it is helpful to analyse the effects in the cases of cylinder and cone. We can distinguish three aspects of the effects (rolling, spinning): (i) the fact that the motion started; (ii) the continuation of the motion; (iii) the quality of the motion. We know that the first causal factor (the antecedent cause), but not the second, is responsible for (i), and that the second causal factor, but not the first, is responsible for (iii). We also know that, certainly in the case of the cylinder, the two causal factors do not work simultaneously. Rather, the antecedent cause may cease before the effect stops, whereas the second causal factor will not.<sup>69</sup>

The picture of causation we obtain in this way does not quite square with modern physics, but it fits in reasonably well with physics as developed in Hellenistic times.<sup>70</sup> As far as we know, the Stoics were not aware of the principle of inertia, and thus of any theoretical explanation of the impact the first causal factor may continue to have on the effect, once the contact between the two bodies has ceased. The physical case on the everyday level thus becomes suitable as an analogy for the point Chrysippus wants to make: whatever there is to the effect beyond the prompting of the motion (i.e. (i) above), can be owed directly only to the constitution of the object at which the effect takes place, i.e. the nature of the mind.

<sup>69</sup> More precisely, the body that becomes the first causal factor may cease being active before the effect stops, whereas the body that becomes the second causal factor will actively contribute to the effect as long as the effect continues.

<sup>70</sup> Cf. on this point Duhot 1989, 173–4.

However, the remaining two aspects of the effect distinguished above, the continuation of the motion (ii), and the quality of the motion (iii), require different explanations. The quality of the motion (iii) is something that has no subsistence of its own: it can be realized only *in a motion*, but is not a motion itself. I assume that the set of properties of the object (cylinder) which belongs to the object independently of whether it moves, is wholly responsible for this quality of the motion. In contrast, the continuance of the motion (ii), i.e. the object's continually moving after having been prompted to move, can be regarded as a motion. In the absence of a principle of inertia, (ii) is most easily explained if one postulates some alteration of the object (cylinder) itself, which was elicited by the antecedent cause. The idea is that in order for the object to be able to *sustain* the motion after the first causal factor has ceased, its overall constitution needs to have changed, when the object changed from being a still object to being a moving object. It is the thus *altered* constitution of the object at which the effect takes place which is responsible for this continuing of the motion.<sup>71</sup> (The continuance of the motion (ii) is thus the only aspect of the effect that is itself a movement, and for which both causal factors are responsible. The antecedent cause is indirectly responsible for the moving, via the change of the object; the second causal factor is directly responsible for the form the continuation of the movement takes.)

We have thus two candidates for the second causal factor: there is the set of stable properties of the object, which is responsible for the quality of the effect; and there is the overall constitution of the object as it is while the effect takes place. We have no direct evidence that the early Stoics made such a distinction. But we find in Simplicius (*Cat.* 212.12–213.1) part of a Stoic theory of three meanings of 'being qualified' (*ποιόν*), which can help to explain it. These Stoics maintained that in the two wider senses, an object's 'being qualified' includes its temporary changes and states. Thus a person who is running, *qua* being a running person, is 'being qualified' in such a wider sense (*Cat.* 212.14–19). On the other hand, in the narrowest sense of 'being qualified', which corresponds to the qualities (*ποιότητες*) an object has, only enduring states of the object are included (*Cat.* 212.19–22). Thus the 'being qualified' of a rolling cylinder *qua* rolling cylinder would be of the first kind, and it would be part of the overall constitution of the cylinder at the time. The cylinder's nature on the other hand would presumably include only enduring and steady properties of

<sup>71</sup> The causation of the continuance of the motion has been conceived of in accordance with a model of transfer of energy: When the first causal factor prompts the beginning of the motion, energy is transferred from it to the body at which the effect takes place, so that it gets into an 'activated' state, and being thus activated—which is a change in the *pneuma* of the object—it makes itself continue moving; cf. M. Frede 1980, 236.

the object, as determined by the narrowest kind of 'being qualified'; it would be a set of qualities (ποιότητες).

Now, the relation between an object's temporarily changed overall constitution and the continuation of its movement may be relevant to Stoic general physics. But in his analogy, Chrysippus is interested in the contribution of a nature of the object that is the same before, while, and presumably after the effect takes place, and which is responsible for the form the effect takes; he is not interested in the overall constitution of the object as it is only while it is moving in its specific way. That this is so is clear for several reasons.

First, the second causal factor is clearly twice labelled in Cicero as the *nature* of the object, and was presumably referred to as *διάθεσις* in Gellius' source. For the Stoics, the nature of an object is not easily changeable (it is *βέβαιος*); the same holds for mental dispositions (*διαθέσεις*), including a person's moral character.<sup>72</sup> Thus the temporarily changed constitution of the object can count neither as its nature nor as a mental disposition. (It is thus wrong to think that the object's nature has temporarily changed, i.e. has temporarily become a different nature; rather some other qualified features of the object have temporarily changed.)<sup>73</sup> This is confirmed by the fact that, second, Chrysippus' ultimate concern is the preservation of moral responsibility. For moral responsibility has to be attached to persons as they are independently of whether they are just in the middle of performing an action or an act of assent. Third, whereas there are clear parallels between the pushing person and the externally induced impression as antecedent causes, and between the rolling/spinning and the assenting/not assenting as the qualities of the response, there is no clear parallel between the continuation of the rolling, as result of the temporary change of the object's constitution, prompted by the antecedent cause, and anything on the explanandum side of assenting.

We can thus assume that the second causal factor is the individual nature of the person's mind, which is a set of qualities (ποιότητες), and thus stable, and that it fully determines the form the effect takes (i.e. whether assent is given). Physically, it is *pneuma* in a certain structure and state of tension. The second causal factor is then active insofar as it is *pneuma*, i.e. part of the active principle (1.1.1), and it is this continual pneumatic activity or tension which is responsible for what form the resulting motion of the soul takes.

Based on the idea that the second causal factor in the production of an assent is the—enduring—individual nature of a person's mind, some scholars have suggested that the individual nature of the mind is

<sup>72</sup> Plut. *Virt. mor.* 441c; virtue is a disposition of the mind (*διάθεσις ἡγεμονικῆς*)

<sup>73</sup> Cf. again Simp. *Cat.* 212.12–213.1.

identical with the cohesive cause,<sup>74</sup> and others that it is the same as a person's 'individual quality' (*ἰδία ποιότης*).<sup>75</sup> Neither suggestion can be right.

The Stoic concept of the *ἰδία ποιότης* has the function to settle a person's *identity*, not to determine a person's individual mental qualities or characteristics; accordingly, the *ἰδία ποιότης* includes features like a person's colour of hair, shape of nose, etc. (Dexippus, *Cat.* 30.20–6) and—according to some sources—remains the same all through the life of an individual (Stob. *Ecl.* I 178, Simp. *An.* 217.36–218.2). Neither of these points holds of the individual nature of a person's mind. It does not include specific physical features of the person, and we can see that the nature can change over time, for example since we know that it includes a person's moral dispositions (especially clear in Gellius), and a person's moral dispositions can change (cf. 6.3.6).

In order to see that the second causal factor of assent cannot be its cohesive cause (*συνεκτικὸν αἴτιον*) either, one has to recall once again that for the Stoics cause is a 'relative' (*πρὸς τι*): a body is a cause only relative to a particular motion or qualitative state, and only as long as it actively contributes to that motion or state. A cohesive cause is a portion of pneuma in an object insofar as it causes the object to be the object it is. It literally holds the object, *qua* being that object, together. It is not a cause of change or motion. Now, it is possible that the same portion of pneuma in an object, at the same time, is more than one cause, and of more than one effect. The pneuma in the mind could simultaneously be the cohesive cause of the mind (holding it together), and the second causal factor in an instance of assenting.<sup>76</sup> But it would be wrong to infer that in that case the second causal factor is the cohesive cause of the *movement*. The pneuma is the cohesive cause of the *qualitative state* of the mind's being that mind, and it is so as long as that mind exists. And it is the second causal factor of the mind's *movement* of assenting at those times at which the person is actually giving assent.

Having drawn the analogy and established the four factors involved in the intrapsychic causation, we can finally consider the purpose of the analogy. The main points appear to be these: As a cylinder and a cone differ in their individual nature, so do you and I. Physically, the differences between individual natures of our minds are due to a difference in tension (*τόνος*) of the mind-pneuma. In every prospective case of assent, whether the incoming impression results in an act of assent to it will

<sup>74</sup> e.g. M. Frede 1980, 336, Long/Sedley 1987, i. 341.

<sup>75</sup> e.g. Long/Sedley 1987, ii. 385.

<sup>76</sup> This on the assumption that the portion of pneuma in an object that is its individual nature is the same as the portion of pneuma in the object that is its cohesive cause—an assumption that may be plausible, but for which we have no evidence.

depend on the state of tension of that pneuma.<sup>77</sup> Thus, the individual nature of the person's mind is responsible for whether assent is given, as the shape of the pushed object is for whether it will roll. Accordingly, when two people with different individual natures of the mind are confronted with a comparable impression, one may give assent, the other withhold it. In both cases, we have to assume, the impression sets the mind, or more precisely the faculty of assent, going; but whether an act of assent ensues is thereby not determined. The faculty of assent functions in such a way that the nature of the mind, and not the externally induced impression, is the decisive factor for the effect. Once assent to an impulsive impression is given, impulse (if considered as a separate item) will follow automatically, and so will the action, provided no external circumstances interfere.<sup>78</sup>

Thus the difference between Chrysippus' theory and the model of action which the opponents claimed the Stoics were committed to, concerns primarily one link in the causal 'chain' from impression, via assent and impulse to action. In this 'chain', at the link of the faculty of assent, Chrysippus, so to speak, hooks in another causal string, the last link of which is the agent's nature of the mind. Fate is not a causal chain, it is a causal network (see 1.4.2). It is the faculty of assent which makes it possible for adult human beings to become the controlling factor of their actions, in that it enables them to respond to externally induced impressions in accordance with the individual nature of their mind. They are hence not forced in their decisions and actions.

The purpose of the analogy is then twofold, explanatory and justificatory. First, the analogy *illustrates* how Chrysippus thinks that (i) the first causal factor does not necessitate the effect (because of the interpolation of the faculty of assent), and that (ii) the agent's own nature bears causal responsibility for the effect, by being decisive for the quality of the effect. Second, the analogy provides a *justification* for the demonstrandum, viz. that the persons 'at which the effect takes place' themselves are somehow responsible for the outcome.

For this second point it is significant that Chrysippus presents two physical bodies of different geometrical form: they stand for two different human beings, with different natures of their minds. The point of the analogy then is that there are cases in which the external antecedent causes are similar (pushing person, comparable impressions), but the effects

<sup>77</sup> Cf. on this point Galen's report from Chrysippus' psychology, *PHP* 5.2.

<sup>78</sup> In the Gellius passage impulse and actions are explicitly included as—presumably indirect—effects. In Cicero the effect in the analogy is only specified as 'for the rest it (the mind) will move by its own power and nature' (*Fat.* 43); even if primarily assent is at issue, this clause could easily accommodate the subsequent impulses and actions, *qua* motions in the mind.

differ noticeably in kind; hence *it follows* that the nature of the objects at which the effect takes place (geometrical bodies, human beings) must be responsible for the difference in effect.<sup>79</sup>

There is an underlying mode of reasoning here that we are familiar with from another Chrysippean passage, which was discussed earlier (Plut. *Stoic. rep.* 1045c, 1.3.2): if in instances of causation the external circumstances are the same, but the outcomes differ, there must be a difference in the object at which the effect takes place. This point is quite different from some modern arguments: Chrysippus defends responsibility by arguing that someone else would do something else in the same situation or that it is in the range of possible human behaviour to do something else; he does not argue that the same person could do something else in the same situation.

We can now also draw the connection to moral responsibility, which was after all a main element in the argument to which Chrysippus replied. In particular the Gellius passage made it clear that there is also a moral dimension to the analogy, which allows one to attach moral responsibility to agents, given that their causal responsibility for their actions has been established: From Gellius *NA* 7.2.7–10 (discussed above, 6.3.1) we know that the individual natures of the mind include what may be called the moral character of a person. Morality for the Stoics here comprises cognition and moral characteristics in the narrower sense. The Stoic primary distinction of individual natures with respect to their morality is that between someone's being wise or not being wise. In the wise person the state of tension of the mind in all its parts will be ideal. As a consequence, assent to theoretical impressions will never be given if they are false, i.e. correspond to false propositions, and assent to impulsive impressions will be given only if they correspond to behaviour that is in accordance with reason or Nature. In contrast, the mind of ordinary, non-wise, people lacks tension. Consequently they will—with varying degrees of frequency from person to person—give assent to the wrong impressions and withhold assent from the right ones. (One could conceive of different “profiles of imperfection”, made up from a person's assents in all possible situations.) An agent's actions, being the result of an act of assent, thus reflect the agent's moral character, and moral appraisal of the agents for their actions becomes possible.

Summing up sections 6.2 and 6.3.1–3 we can say that in both Gellius and Cicero, in the opponents' arguments and in Chrysippus' rebuttals,

<sup>79</sup> [Arist.] *Mund.* 6 makes a similar point in a slightly different context. Gellius has only the cylinder, but, unlike in Cicero, in his passage we have the emphasis on two types of persons immediately before the analogy (*NA* 7.2.8–10), and the emphasis on the nature of the person as bad, which shows Chrysippus is making the same general point.

as well as in the cylinder and cone analogy, moral responsibility is seen as ultimately grounded on how a person *is*, or on that person's dispositions—and not on the fact that the person could do otherwise, circumstances being the same, or has a free, i.e. causally undetermined, will, etc. But before I go further into the question of moral responsibility and determinism, another piece of evidence needs to be aired.

#### 6.3.4 Another Chrysippean argument for moral responsibility

With the cylinder analogy in Cicero, *On Fate* 42–3, Chrysippus gave an explanation and justification of his thesis that impressions are not sufficient and necessitating causes of acts of assent but only proximate ones. However, in Cicero no formal proof of this thesis is presented. Plutarch, *On Stoic Self-contradiction* 1055f–1056a, provides evidence that Chrysippus set out to prove it as well:

- (1) He (i.e. Chrysippus) wants to prove that the impression is not a self-sufficient cause of the assent . . .<sup>80</sup> (*Stoic. rep.* 1055f)

The Sage Argument (as I will call it) itself then is presented thus:

- (2) . . . he (Chrysippus) has stated that, if the impressions brought about the assents self-sufficiently, then the sages would do harm when they produce false impressions. (3) For the sages frequently make use of falsehood towards the bad and present a plausible impression <to them>; (4) but this <plausible impression> is not the <self-sufficient><sup>81</sup> cause for the assent, since then it would also be the <self-sufficient> cause of the false belief and of the deception.<sup>82</sup> (*Stoic. rep.* 1055f–1056a)

<sup>80</sup> Τὴν γὰρ φαντασίαν βουλόμενος οὐκ οὔσαν αὐτοτελή τῆς συγκαταθέσεως αἰτίαν ἀποδεικνύειν. . . .

Strictly speaking, all that is going to be proved is that impressions are not in all cases self-sufficient causes of assent. As in Cic. *Fat.* 41–3, fate is never mentioned in the argument; nor is the concept of that which depends on us. Thus we do not know for sure whether the argument was part of the debate over fate, or even of Chrysippus' second book on fate. Still, it seems likely, because the only two areas for which a proof of the thesis at issue is relevant are the psychology of assent and the question of responsibility of the agent, and the distinction of causes was introduced or employed by Chrysippus in the context of the discussion of fate. Moreover, that which depends on us is mentioned later in Plutarch's criticism together with some standard counters to Stoic fate doctrine.

<sup>81</sup> For the argument to make sense, 'cause' has to be understood as self-sufficient (αὐτοτελής) cause throughout (see below).

<sup>82</sup> . . . εἶρηκεν ὅτι "βλάψουσιν οἱ σοφοὶ ψευδεῖς φαντασίας ἐμποιοῦντες, ἂν αἱ φαντασίαι ποιῶσιν αὐτοτελῶς τὰς συγκαταθέσεις· πολλάκις γὰρ οἱ σοφοὶ ψεύδει χρώνται πρὸς τοὺς φαῦλους καὶ φαντασίαν παριστάσι πιθανήν, οὐ μὴν αἰτίαν τῆς συγκαταθέσεως· ἐπεὶ καὶ τῆς ὑπολήψεως αἰτία τῆς ψευδοῦς ἔσται καὶ τῆς ἀπάτης".



and a parallel passage helps to fill in some of the details:

(5) But again, Chrysippus states that both god and the sage bring about false impressions, (6) not asking us to assent or give in <to the impressions>, but only to act and have an impulse towards the object of the impression; (7) but we, since we are bad, assent to those impressions through our weakness.<sup>83</sup> (*Stoic. rep.* 1057ab)

The argument is based on the Stoic doctrine of the sage, namely (i) on the familiar principle that sages do not inflict harm (cf. *Stob. Ecl.* II 101.5, *DL* 7.123), and (ii) on the assumption that the wise produce false impressions in the non-wise (3), (5). (i) would presumably have been granted by a range of non-Stoics as well, but (ii) is more specific to Stoic ethics. The argument's value as a proof is confined to people who accept (i) and (ii); these will be primarily Stoics. (This suggests that the relation between fate and responsibility was seen as a problem within the Stoic school and that Chrysippus had to convince not only other schools of his compatibilism, but some of his fellow Stoics as well.) Of course, nothing compels us to assume that the Sage Argument was Chrysippus' sole proof to back up his point.

The form of the proof cannot be established with certainty. Not all premisses are given explicitly, and the clarity of Plutarch's presentation leaves something to be desired. Still, the general course of reasoning can be restored. We have the demonstrandum and conclusion in (1), and can extrapolate two premisses from (2) and (3), and add the principle that sages do not inflict harm as a third. Here is one possible reconstruction of the argument, which fits in with Chrysippus' syllogistic.<sup>84</sup>

- (P1) If the impressions are self-sufficient causes of assent, then if sages produce false impressions in the non-wise, they inflict harm. (2)
- (P2) Sages produce false impressions in the non-wise. (3), (5)
- (P3) Sages do not inflict harm.
- (C) Therefore it is not the case that the impressions are self-sufficient causes of assent. (1)

Whatever the exact structure of the argument, the reasoning behind it must have been something like the following: First, premiss (P2), can be more fully stated as:

- (P2') Sages at times produce—knowingly and intentionally—plausible but false impressions in a non-wise person's mind.<sup>85</sup>

<sup>83</sup> *Ἀϋθὶς δὲ φησι Χρύσιππος καὶ τὸν θεὸν ψευδεῖς ἐμποιεῖν φαντασίας καὶ τὸν σοφόν, οὐ συγκατατιθεμένων οὐδ' εἰκόντων δεομένους ἡμῶν ἀλλὰ πραττόντων μόνον καὶ ὁρμώντων ἐπὶ τὸ φαινόμενον, ἡμᾶς δὲ φαύλους ὄντας ὑπ' ἀσθενείας συγκατατίθεσθαι ταῖς τοιαύταις φαντασίαις.*

<sup>84</sup> By using the first and third *themata*, the argument can be analysed into two Chrysippean first indemonstrables.

<sup>85</sup> For this Stoic thesis cf. also *SE M* 7.42; *Stob. Ecl.* II 7, 111.10; Quint. *Inst. orat.* 12.1.38.

The impressions at issue are rational impressions (as all impressions of adult humans are) and correspond to propositions (6.1.2); their 'production' should consist simply in the fact that the wise say them to the non-wise (although the wise themselves do not assent to them). That the impressions are plausible (*πιθανά*) means that even if false, they have the appearance of being true (DL 7.75). The Stoics assumed that non-wise people usually assented to plausible impressions. We thus obtain

The non-wise give assent to the plausible but false impressions given to them by the sage.

For the Stoics the result of someone's having given assent to an impression is that the person is in a certain 'state' of holding a belief (*ὑπόληψις*, cf. 6.1.2) which in the case of false propositions is a harmful state. It then follows that

The non-wise are in the state of holding a false belief, and of deception, which is harmful.

We can now understand Chrysippus' explication of the first premiss in (6): If the false impressions produced by the sages were self-sufficient causes<sup>86</sup> of assent, then the sages would do harm—viz. the harm that corresponds to the state of false belief and deception in the non-wise.<sup>87</sup> But (P3), the sages do not inflict harm. Hence it follows (C) that the impressions are not self-sufficient causes of assent.

The philosophical background story to the seemingly bizarre kind of situation that underlies this argument can be filled in from the parallel passage at *Stoic. rep.* 1057b cited above and other sources (see references to (P2') above): Occasionally, the only way a sage can produce a certain good, desired, or commanded outcome is by producing false impressions in non-wise people, i.e. in clear, by telling them falsehoods. For it is a necessary condition for the intended result that the non-wise follow those impressions in their actions. The sages' moral integrity is preserved by saying that they intend the result only, not the means, i.e. the assent to falsehoods by the non-wise—although they of course know that the non-wise will give assent to the falsehoods.<sup>88</sup> Examples include what we

<sup>86</sup> Only if 'cause' in (6) is understood as self-sufficient (*αὐτοτελής*) cause, as in the formulation of the demonstrandum (1), does Chrysippus' explanation make sense. So also Donini 1988, 26.

<sup>87</sup> I assume that if *x* is a cause of a change *y* and *y* results in a state *z*, then *x* is cause of the body's having come to be in the state *z*. This is at least what the text suggests.

<sup>88</sup> Pace Inwood 1985, 85–6. Note that what is at issue is not who is going to be blamed for the action. The action itself is the right one (from an overall world view), and because it is right, the sages are not to be blamed, nor are the non-wise, as they act 'correctly', although on a false belief. The only bad or harmful thing is the assent to the false impression plus the subsequently held false belief. Blame would hence be restricted to the assent and the resulting state of error but not extended to the action.

may call 'utilitarian' or 'white' lies, even though the Stoics do not regard the sages as lying;<sup>89</sup> e.g. sick people would be made to believe certain falsehoods in order to make them behave in a way that secures their recovery.

The power of conviction of this argument may be regarded as rather limited—owing to its dependency on the Stoic theory of the sage. However, this is immaterial for our present main concern, Chrysippus' view on determinism and responsibility, for which the argument provides useful confirmatory evidence, since it deals with the question of *who is responsible* for the erroneous beliefs of the non-wise. The answer given is that the responsibility lies with those people themselves, and not with the impressions and what brought them about externally, i.e. the sages. Chrysippus' denial that the impressions are self-sufficient antecedent causes is exactly parallel to his denial that impressions are perfect and principle antecedent causes in Cicero *Fat.* 40–2. Undoubtedly, Chrysippus is making the same general point in both cases. Plutarch's 'self-sufficient' (*αὐτοτελής*) and Cicero's 'perfect' (*perfectus*) certainly refer to the same property of causes, Cicero's *perfectus* being a translation of Plutarch's *αὐτοτελής*.<sup>90</sup> What makes the non-wise responsible for their incorrect beliefs is explicated in a clause of the above-cited parallel passage *Stoic. rep.* 1057b: 'but we, *since we are bad*, assent to those impressions *through our weakness*.' (7). Two factors come together: first, responsibility lies with those who give assent; second, the assenting is determined or co-caused by the moral nature of the assenting persons (they are bad), or, in physical terms, by their weakness. This weakness is not bodily feebleness, but the weakness of the individual's soul, the lack of proper tension. This is exactly what we found in Cicero and Gellius above. An intra-psychical change, assent, is singled out as the pivotal point for the attachment of responsibility, and whether assent is given depends on the individual (moral) nature of the person in question.

#### 6.3.4.1 *An argument for responsibility which Chrysippus dismissed?*

There is another passage in Plutarch, which, for reasons of completeness, should be mentioned here, since it may present part of a controversy that belonged to the same general debate recorded in our Cicero and Gellius passages. This passage is Plut. *Stoic. rep.* 1045bc; I have quoted and discussed it in detail in a different context in section 1.3. For convenience, I quote the relevant bits again:

<sup>89</sup> e.g. Stob. *Ecl.* II 111.10; the Stoics explain this by stating that lying is not simply saying something false, but saying something false for fraudulent purposes, in order to deceive one's neighbours (ibid. 111.11–13). Cf. also Long 1971b, 99–102 on this general issue.

<sup>90</sup> For details see Bobzien 1998b, section 4. Cf. also below 6.4.2.

(1) Some philosophers, believing that they bring about release for the impulses from being forced by external causes, (2) construct in the ruling faculty of the soul some adventitious motion (3) which becomes evident best in the case of indistinguishables. (5) For when it is necessary to take one of two things, (4) when the two are of equal power and are in the same state, (6) <and> when no cause leads to either of them, (7) since it in no way differs from the other, (8) <then> the power of spontaneity itself in the soul, by taking from itself an inclination, (9) cuts through the puzzle.<sup>91</sup> (*Stoic. rep.* 1045b–c)

and here is the concluding sentence of Chrysippus' reply again:

(10) . . . in the case of these things which some people invent and name 'spontaneous', (11) concealed causes sneak in and, (12) without our noticing it, they lead the impulse to one of the two alternatives.<sup>92</sup> (*Stoic. rep.* 1045c.)

The subject of the argument and of Chrysippus' reply are the impulses (*ὀρμαί*), i.e. the specific motions of the soul which precede action—as is attested by the first and the last sentences. (The passage does not specify whether these impulses are human impulses only, or encompass animal impulses in general; the argument suggests human impulses.)

In sentence (1) the problem that concerns these impulses is described: the impulses need to be released from being forced by external causes. This problem is a familiar one; once again we encounter *external* causes and the *compulsion* of motions of the soul by such causes. These are exactly the factors we found repeatedly described as problematic in our Gellius and Cicero passages. In Plut. *Stoic. rep.* 1045b–c we are not told why the impulses need to be released from external force. In Gellius and Cicero the reason was so that the agents can be held morally responsible for their actions—and this may have been the issue here as well—in which case the impulses would be human, rational, impulses.

The solution to the problem that is suggested by 'some philosophers' is that we have a certain power of spontaneity (*ἐπелеυστική δύναμις*) in our soul. What sort of power (capacity, disposition) this is, is uncertain.<sup>93</sup> But the context makes it plain that it is a power that initiates motion without itself being prompted. The type of situations in which the activity of this power becomes most readily apparent are said to be those in which one has to choose between two indistinguishable options (for details see above, 1.3.1), i.e. cases in which ratiocination is to no avail for what to do. In such cases this power of the soul 'takes an inclination from itself', and thus the agent moves one way or the other.

<sup>91</sup> Cf. 1.3.1 for the Greek text.

<sup>92</sup> Cf. 1.3.2 for the Greek text.

<sup>93</sup> I find Boys-Stones's claim (1996, 90–1) too speculative, that this power is the shape of the soul, which allows people to view the world in terms of the actions they might perform.

If these situations bring out what is characteristic of this power of spontaneity, it is clearly very badly equipped to justify that someone decided freely between alternative options, because these are situations in which there is nothing to decide about. The introduction of such a power would be a queer attempt at preserving freedom of decision as a basis for moral responsibility. But the introduction of such a power is not an odd answer if the problem is how to free impulse from external force—which is exactly what the problem is *said* to be (1), and which I therefore take the problem to *have been*. Agents who have such a power, can bring about movements of the soul that are not forced by external causes. The ‘power of spontaneity’ thus ensures un-predetermined motion by postulation. But nothing in the text suggests that the un-predetermined (or even entirely undetermined) motion thus warranted was meant to secure indeterminist freedom to do otherwise.

In his reply, Chrysippus focuses on one point only (cf. 1.3.2): he interprets the power of spontaneity as introducing uncaused motion or self-motion (τὸ αὐτόματον)—i.e. undetermined or un-predetermined motion. And he rejects that either is involved in the case of impulses or of any other motions. Rather, he claims, preceding causes are always operative, even if they may be hidden to us.<sup>94</sup> (We are told how *he* thinks it is possible that human assent and impulse are not externally forced in Cic. *Fat.* 41–3.) There is thus no reason to assume that the passage draws from a debate over freedom to do otherwise and causal determinism. Rather the general problem at issue in it seems to be the same which Chrysippus is reported to have discussed by Gellius and Cicero, and in Plut. *Stoic. rep.* 1055f–1056a.

### 6.3.5 *Freedom, moral responsibility, and that which depends on us*

If Chrysippus dealt anywhere in our sources with the philosophical problem of the compatibility of freedom and determinism, it should be in the passages from Cicero, Gellius, and Plutarch discussed in the present chapter. On this point there is general agreement. But so far the analysis of the texts has yielded little that bears any resemblance to modern arguments for the compatibility of causal determinism with freedom. Thus, for example, no Greek word for freedom is used in the passages. In order

<sup>94</sup> Note that Chrysippus’ own concept of ἡ ἔτυχεν ἐπικλίσις (‘chance inclination’, which Plutarch exploits when constructing the self-contradiction in *Stoic. rep.* 1045ef) is quite different from the ἐπελευστική δύναμις: if there are no *reasons* to choose *a* or *b* (because they are in all relevant aspects alike) then we stop reasoning and follow some non-rational preference or propensity. This concept is introduced on the level of deliberate choice between two courses of action. But neither is the context here determinism, nor is there any reason to think that the choice was envisaged as undetermined or un-predetermined.

to see what problem Chrysippus was concerned with, it is necessary to make a number of distinctions. (These distinctions are kept rough and schematic. They are left deliberately vague in certain respects, because the ancient theories whose understanding they are intended to further are themselves stubbornly vague in those respects.) The first is between different kinds of freedom. I distinguish two kinds of indeterminist freedom, the second being a subtype of the first:

- (F1) *freedom to do otherwise*: I am free to do otherwise if, being the same agent, with the same desires and beliefs, and being in the same circumstances, it is possible for me to do or not to do something in the sense that it is not fully causally determined whether or not I do it.
- (F2) *freedom of decision*: a subtype of freedom to do otherwise. I am free in my decision if, being the same agent, with the same desires and beliefs, and being in the same circumstances, it is possible for me to decide between alternative courses of action in the sense that it is not fully causally determined which way I decide. (I here understand 'deciding' as a sort of 'doing'.)

(F1) differs from (F2) in that it leaves it open in which way it is possible for the agent to do or not to do something. Proponents of either kind of indeterminist freedom may be called indeterminist libertarians. From these kinds of indeterminist freedom must be distinguished what I call 'un-predeterminist' freedom.

- (F3) *un-predeterminist freedom*: I have un-predeterminist freedom of action/choice if there are no causes prior to my action/choice which fully determine whether or not I perform/choose a certain course of action, but in the same circumstances, if I have the same desires and beliefs, I would *always* do/choose the same thing. Un-predeterminist freedom guarantees the agents' autonomy in the sense that nothing except the agents themselves is causally responsible for whether they act, or for which way they decide. Un-predeterminist freedom requires a theory of causation that is not a theory of event-causation (i.e. a theory which considers both causes and effects as events). Un-predeterminist freedom would work with a concept of causality which considers things or objects (material or immaterial) as causes, and events, movements or changes as effects. Such a conception of causation is common in antiquity, and, as we have seen, is held by the Stoics.

In the interpretation of ancient texts, indeterminist freedom is often confounded with un-predeterminist freedom. But it differs from the latter in that it not only requires the absence of *predetermining* causal factors, but in addition allows for the possibility of different actions/decisions of the same agent in the same circumstances. From both these types of freedom must be distinguished the following ones which are compatible

with indeterminism and 'un-predeterminism' as well as with causal determinism:

- (F4) *freedom from force and compulsion*: I am free in my actions/choices in this sense, if I am not externally or internally forced or compelled when I act/choose. This does not preclude that my actions/choices may be fully causally determined by external and internal factors.
- (F5) *freedom from determination by external causal factors*: agents are free from external causal factors in their actions/choices if the same external situation or circumstances will not necessarily always elicit the same (re-)action or choice of different agents, or of the same agent but with different desires or beliefs.
- (F6) *freedom from determination by (external and) certain internal causal factors*: I am in my actions/choices free from certain internal factors (e.g. my desires), if having the same such internal factors will not necessarily always elicit in me the same action/choice.

The last two types of freedom, (F5) and (F6), differ from (F4), freedom from force, in that (F4) only rules out force and compulsion, whereas (F5) and (F6) also preclude full causal determination by those causal factors, based e.g. on nothing but universal regularity. The list of types of freedoms (F1) to (F6) is evidently neither exhaustive nor exclusive.

Next, there are two categorically different conceptions of moral responsibility, one grounded on the autonomy of the agent, the other on the ability of the agent to do otherwise. The first (MR1) considers it a necessary condition for praising or blaming an agent for an action, that it was the agent *and not something else* that was causally responsible for whether the action occurred. The contrast is between self-determination and other-determination to act. Actions or choices can be attributed to the agent because it is in them that the agents, *qua* rational or moral beings, manifest themselves. Some thinkers consider the un-predeterminedness of an action/choice (above (F3)) as a necessary condition for autonomy, and consequently for the attribution of moral appraisal.

The second conception of moral responsibility (MR2) considers it a prerequisite for blaming or praising an agent for an action that the agent could have done otherwise. This idea is often connected with the agents' *sentiments or beliefs* that they can do/could have done otherwise, as well as the agents' feelings of guilt or regret about what they did. Some philosophers consider the causal indeterminateness of an action/choice as a necessary condition for the guarantee that the agent can do or could have done otherwise. The concepts of indeterminist freedom of an agent (see above) gain importance at the point at which moral appraisal is connected with the idea that at the very same time, the same agent, with the same beliefs and desires, could have done otherwise.

Depending on what conception of moral responsibility ancient determinist philosophers have, they will encounter different philosophical problems. With an autonomy-based concept of moral responsibility, they tend to face the *problem of the compatibility of autonomy and determinism*: how can I, the agent, be held responsible for my actions/choices, if everything, including my actions/choices is determined, predetermined, or necessitated by god, fate, providence, necessity, or various other external and/or internal causal factors? With a conception of moral responsibility based on a notion of freedom to do otherwise, determinists tend to face a very different kind of difficulty, viz. the *problem of the compatibility of freedom to do otherwise and determinism*: How can I meaningfully say that I can do/could have done otherwise than I do/did, if what I do is fully causally determined or predetermined? Or, for the special case of freedom of decision (F2), how can I be said to be able to decide otherwise than I do, if it is fully causally determined or predetermined how I decide?

Building on the previous sections (6.2–6.3.4), the purpose of the present section is to demonstrate that as far as our evidence goes, we have no reason to assume that Chrysippus, or his opponents, were involved in a debate about the compatibility of freedom to do otherwise and causal determinism, nor that they based moral appraisal directly on the idea that the agent could have done otherwise (MR2). Rather, all our texts suggest that both Chrysippus and his opponents argued on the basis of the idea that the agent's autonomy is a necessary—and sufficient—condition for moral responsibility (MR1). The Hellenistic controversy was about the problem how, if a person's behaviour is in accordance with fate, the individual person can nevertheless be causally responsible and be held morally accountable for it.

This was clearly the result of the analyses of the Gellius, Cicero, and Plutarch passages: the opponents are presented as arguing that the Fate Principle precludes the possibility that the agents can be held responsible, and Chrysippus argues each time that despite the fact that everything happens in accordance with fate, it is the agents (the nature of their minds) who are causally responsible for what they do. Therefore blame and praise cannot be shifted onto external factors such as sages (as in Plutarch) or temptations of various kinds (as in Gellius).

But so far I have neglected the occurrence of expressions such as *in nostra potestate* ('in our power') in the above-mentioned and related texts, and the questions of how such expressions and the human ability to give and withhold assent fit into Chrysippus' arguments, and how they relate to freedom and moral responsibility. Modern commentators have regularly connected the expressions *esse in nostra potestate*, *esse in nobis*, *sita in nobis*, εἶναι ἐφ' ἡμῖν, and γίνεσθαι παρ' ἡμᾶς with freedom to do



otherwise, with free-will, and with moral responsibility,<sup>95</sup> and interpretations of Chrysippus' view are often grounded on a particular understanding of these expressions. I shall now examine the role such expressions played in Chrysippus' compatibilism, since what concepts of freedom and moral responsibility he was concerned with depends to a certain extent on how he understood these expressions.

In Cicero the phrases 'in our power' (*in nostra potestate*) and 'lying with us' (*sita in nobis*) were central to the controversy between Chrysippus and his opponents, the opponents claiming that Chrysippus' determinism would destroy the things that are in our power or lie with us. The two phrases seem to have been used interchangeably by Cicero in *Fat.* 40.<sup>96</sup> They may both render the Greek phrase ἐφ' ἡμῶν ('depending on us')<sup>97</sup> of which each expression would be a reasonably close translation.<sup>98</sup>

The expression ἐφ' ἡμῶν is familiar from Aristotle's *Nicomachean Ethics* (*EN* III.3 and 5) and *Eudemian Ethics* (*EE* II.6 1223<sup>a</sup>1–9 and II.10). In later antiquity it gained general acceptance as the standard way of referring to the kind of human self-determination at issue in the discussions of compatibilism (cf. below 7.1, 8.5, 8.7). There is no direct evidence that Chrysippus employed the phrase ἐφ' ἡμῶν, or more generally ἐπί with *dativus personae*, in the context of fate. But it is likely that he used it, since ἐφ' ἡμῶν is a standard term in later Stoic philosophy.<sup>99</sup> If we retranslate into Greek from Cicero's report from Chrysippus, it appears that ἐπί *c. dat. pers.* was used as a prepositional phrase in predicative position: e.g. ἐφ' ἡμῶν ἐστι, '(something) depends on us'—just as we find it in Aristotle. Only later do we encounter a nominalization of the phrase, obtained by pre-fixing a neuter article: τὸ ἐφ' ἡμῶν, 'the depending on us' or 'that which depends on us'; this noun-phrase always occurs with the first person plural pronoun (see 8.5 and 8.7).

<sup>95</sup> There is a tradition of rendering or understanding τὸ ἐφ' ἡμῶν and even τὸ παρ' ἡμῶν as 'free will' or 'freedom' (so for instance Greene 1944, 346 n. 87, Theiler 1946, 85–6 with n. 164, Sambursky 1959, 61, Talanga 1986, 150, 'Chrysippos' in *Der kleine Pauly*, 1170, Dobbin 1991, 124). As we will see, at least in the Stoic case, this is rather misleading; cf. also 8.7.

<sup>96</sup> Cf. also Cic. *Acad.* II 38.

<sup>97</sup> The translation 'depend(ing) on us' is not ideal; but for my purposes it is preferable to the alternatives 'up to us', 'in our power', and 'attributable to us', since it shares a range of possible meanings which are parallel to those which ancient philosophers bestowed on the Greek ἐφ' ἡμῶν in the discussion of determinism (see below and 8.4, 8.5, and 8.7).

<sup>98</sup> In Gellius' report from Chrysippus there is no identifiable Latin expression for ἐφ' ἡμῶν. But both in the title and in the Cicero appendix, *NA* 7.2.15, we do have *esse . . . in nobis*, which would be another adequate translation of εἶναι ἐφ' ἡμῶν (also used by Cicero in *Fat.* 9); hence we can assume that this is what Gellius understood the passage to be about (cf. also *sponde* in *NA* 7.2.5, *voluntarius* in *NA* 7.2.8).

<sup>99</sup> Cf. e.g. Epict. *Diss.* 1.1; Marcus Aurelius, 6.32; Alex. *Fat.* ch. 13, and Plutarch's book-title περὶ τοῦ ἐφ' ἡμῶν πρὸς τοὺς Στωικούς, *Lamprias* 154.

The absence of such a noun-phrase, and of any philosophical definition of that which depends on us in the early Hellenistic discussion may be an indication that at Chrysippus' time the phrase ἐφ' ἡμῶν was not yet a technical philosophical term and that the concept itself was not yet the object of philosophical disagreement. Rather, philosophers seem to have shared some common—if perhaps vague—understanding of the meaning and function of the phrase ἐπί *c. dat. pers.* in the discussion about determinism. There seems to have been rough agreement upon which things count as depending on (ἐπί) human beings.

The crucial information about the role of the concept of that which depends on us in the debate in which Chrysippus participated, comes from Cic. *Fat.* 40: Chrysippus' opponents took it as a necessary condition for moral appraisal that assents and actions depend on us. From Chrysippus' reply (*Fat.* 41–3) we can infer that Chrysippus accepted this. For his main point in *Fat.* 41 is that the Fate Principle does not preclude the possibility that impulse (and assent) depend on us. In order to see what Chrysippus' problem of compatibilism was, we thus need to know in which way he and his opponents understood the phrase 'depending on someone' (ἐπί *c. dat. pers.*). This task is exacerbated by the facts that the phrase can be understood in a number of relevantly different ways, and that ancient authors provide little information about how they understood it. The difference that is most pertinent to the present question is that between readings in which the phrase implies indeterminist freedom, and readings in which it does not. I assume that in our context the phrase was generally used to denote a two-sided, potestative concept of depending on someone—a use that is well-attested (e.g. LSJ ἐπί, I.1g).<sup>100</sup>

By 'two-sided' I mean that if some occurrent or action *x* depends on some person, then not-*x* depends on that person, too. Formulations such as 'assent and action depend on us / are in our power' (Cic. *Fat.* 40) can thus be read as short for 'it depends on us / is in our power *whether or not* we assent and act'. In such a two-sided reading of the phrase, the class of things that depend on us includes unrealized possibilities; in fact, it consists of precisely 50 per cent unrealized possibilities. For example, when at a certain time walking depends on me, then not walking depends on me, too. But I will be able only either to walk or not to walk at that time—not both. Hence either one or the other will remain an unrealized possibility.

By 'potestative' I mean that ἐπί *c. dat. pers.* is taken to imply that the person in question has a two-sided capacity or power which allows for alternative kinds of behaviour: walking can only depend on me / be in

<sup>100</sup> The view I expound on the following pages is a modification of what I wrote on this topic in Bobzien 1997 and supersedes that publication.

my power if I have a capacity for both walking and not walking. Such a two-sided capacity may or may not be coupled with a rational power of deciding between the two options of e.g. walking and not walking.

I further assume that, in our context, if some act or action of  $\phi$ -ing depends on a person, this entails that there is no external force that makes the person  $\phi$ , nor are there external hindrances that prevent the person from  $\phi$ -ing. This assumption seems to be warranted by the Gellius and Cicero passages, which presupposed that external force makes moral responsibility impossible.

There are then two importantly different ways in which such two-sided potestative concepts of depending on us can be understood: one that is neutral with respect to determinism and indeterminism; another that entails indeterminist freedom of the agent. A typical 'neutral' two-sided potestative reading would be this:

- (i) Walking depends on me at a certain time if at that time I have the *general two-sided capacity* for walking, and nothing (or nothing external) forces me to walk or hinders me from walking—even if in the *specific* situation it is fully causally determined that I will (or that I will not) walk. I believe that Aristotle uses  $\epsilon\phi' \eta\mu\acute{\iota}\nu$  most of the time in a way similar to this.<sup>101</sup>
- (ii) Alternatively, one can also conceive of a two-sided potestative concept of  $\epsilon\phi' \eta\mu\acute{\iota}\nu$  that is neutral towards determinism and indeterminism and is used for action *types*, without reference to a specific time. So walking may be said to be the sort of thing that is generally in the power of human beings.

By contrast, the phrases 'depending on us' ( $\epsilon\phi' \eta\mu\acute{\iota}\nu$ ) and 'in our power' (*in nostra potestate*) have been understood as indeterminist in the following way: It is assumed that walking depends on me at a certain time, if at that time whether or not I will walk is causally un-predetermined, *and* depends on my free decision.<sup>102</sup> When the expressions are understood as indeterminist, two-sided, potestative in this way, the 'we' ('us') in  $\epsilon\phi' \eta\mu\acute{\iota}\nu$  takes on an interesting role: The 'us' in e.g. 'walking depends on us' is given the status of a causally independent decision-maker. *We choose* whether or not we walk, and we do so freely, i.e. independently of external circumstances, of our own developmental history, and of our present character dispositions and beliefs.

This kind of indeterminist potestative, two-sided, reading of  $\epsilon\phi' \eta\mu\acute{\iota}\nu$  implies freedom to do otherwise. Accordingly, proponents of such a

<sup>101</sup> Cf. the passages given above for  $\epsilon\phi' \eta\mu\acute{\iota}\nu$ , and EN 1135<sup>23</sup>-8, which suggests the absence of external hindrances.

<sup>102</sup> This general line is taken by some later Peripatetics as interpretation of τὸ  $\epsilon\phi' \eta\mu\acute{\iota}\nu$ ; I sketch the development in later antiquity of this kind of concept of  $\epsilon\phi' \eta\mu\acute{\iota}\nu$  below in 8.7.

reading tend to presuppose that Chrysippus and his opponents have a conception of moral responsibility of type MR2: the assumption is that, e.g. in Cicero *Fat.* 40, freedom to do otherwise is taken to be the necessary condition for moral appraisal that is expressed.

Our texts (Cicero, Gellius, Plutarch) do not allow us to establish in what way exactly the phrase 'depending on us' (ἐφ' ἡμῶν) or 'in our power' (*in nostra potestate*) was understood. But they contain sufficient information to rule out that Chrysippus understood the phrase in an *indeterminist*, potestative, two-sided way.

First, there is no positive evidence for such a concept: there is nothing in our sources on early Stoics that suggests such an indeterminist concept, nor is there evidence in other Hellenistic debates, or in Aristotle's writings. Neither is the concept of moral responsibility ever connected with a belief after the deed that one could have done otherwise, or with feelings of guilt or regret that one did what one did.

Second, there is some evidence that speaks against such a concept: as we have seen (6.2–6.3.4), Chrysippus' opponents in Gellius, and Chrysippus in his arguments in Cicero, Gellius, and Plutarch, all attach moral responsibility to the fact that the agent is the main causal factor of the action—not to the idea that the agent could have done otherwise. Moreover, Chrysippus argued that the reason why our actions depend on us is that they are the result of an act of assent, which in turn depends on us. And he justified the fact that assents depend on us by arguing that the individual nature of our minds is causally responsible for whether they occur (Cic. *Fat.* 42–3, cf. sections 6.3.3 and 6.3.4). But if, in all cases in which someone actually gives assent, it is the fact that the nature of the mind (co-)caused the assent, that makes it depend on us, then it becomes very unlikely that Chrysippus' concept of something's depending on us (or being in our power) is indeterminist.

There are two other phrases in our sources that express that something depends on someone, viz. the phrases παρ' ἡμᾶς and ἐξ ἡμῶν. They, too, have been taken as evidence that Chrysippus was concerned with free will or with freedom to do otherwise. Since Chrysippus is said to have tried to show the compatibility of the Fate Principle with things παρ' ἡμᾶς and ἐξ ἡμῶν (Eus. *Praep.* ev. 6.8.2) especially the phrase παρ' ἡμᾶς has been taken as synonymous or interchangeable with the phrase ἐφ' ἡμῶν in the context of Hellenistic discussions of determinism. Accordingly, it, too, has been taken to be two-sided and potestative, and to denote freedom to do otherwise. However, it is my view that the expressions were not generally interchangeable, and that Chrysippus' use of παρ' ἡμᾶς does not imply that he took part in a debate over freedom to do otherwise.

Unlike ἐφ' ἡμῶν, the phrases παρ' ἡμᾶς and ἐξ ἡμῶν are directly recorded for Chrysippus, if by one author only: Diogenianus, in Eus. *Praep.* ev. 6.8

(in part discussed above in 5.2 and 5.3). In this presentation and criticism of Chrysippus' books on fate, Diogenianus mainly uses  $\pi\alpha\rho' \eta\mu\acute{\alpha}\varsigma$  and a range of related expressions, but never the phrase  $\acute{\epsilon}\phi' \eta\mu\acute{\iota}\nu$ .<sup>103</sup>

In the context of determinism the phrase  $\pi\alpha\rho' \eta\mu\acute{\alpha}\varsigma$  is more common in Epicurean texts, but not exclusive to them.<sup>104</sup> It is plausible that Chrysippus participated in the same general discussion as Epicurus and early Epicureans, and hence used the same ordinary language phrases. Both in Epicurean texts and in Chrysippus, we commonly find  $\pi\alpha\rho' \eta\mu\acute{\alpha}\varsigma$   $\gamma\acute{\iota}\gamma\text{ν}\epsilon\sigma\theta\alpha\iota$ , (to *happen* or *be the case* because of us) whereas  $\acute{\epsilon}\phi' \eta\mu\acute{\iota}\nu$  standardly comes with  $\acute{\epsilon}\iota\text{ν}\alpha\iota$  (to be). This is significant. I believe that where we have the phrase  $\pi\alpha\rho' \eta\mu\acute{\alpha}\varsigma$   $\gamma\acute{\iota}\gamma\text{ν}\epsilon\sigma\theta\alpha\iota$ , this does not usually denote a two-sided, potestative, concept of dependency, but a one-sided causative one. (Such a use of  $\pi\alpha\rho\acute{\alpha}$  with *accusativus personae* is well-attested, see LSJ C III 7.)

By 'causative' I denote the fact that the prepositional phrase ' $\pi\alpha\rho\acute{\alpha} \gamma$ ' in ' $x$   $\pi\alpha\rho\acute{\alpha} \gamma$   $\gamma\acute{\iota}\gamma\text{ν}\epsilon\sigma\theta\alpha\iota$ ' refers to that which is a causal factor or a reason of  $x$ . In this case, translations like 'happens because of us' seem adequate. When I call the phrase 'one-sided', I understand this to entail that if some occurrent or action  $x$  depends on some person, then not- $x$  does not depend on that person: for example, if at a certain time my walking happens because of me, then it is not the case that my not walking happens because of me, too. For in that case my not walking does not happen at all. In this case of a one-sided, causative concept of depending on us, the 'we' in  $\pi\alpha\rho' \eta\mu\acute{\alpha}\varsigma$  expresses a necessary *causal* factor of that which happens and depends on us.<sup>105</sup> The idea is that, when sifting through the things *that actually happen* ( $\gamma\acute{\iota}\gamma\text{ν}\acute{o}\mu\epsilon\text{ν}\alpha$ ) one distinguishes: well, this came to be by external force, and that happened because of you, and so forth.<sup>106</sup>

We have good reasons to assume that Chrysippus, like Epicurus and the Epicureans generally, used the phrase  $\pi\alpha\rho' \eta\mu\acute{\alpha}\varsigma$  as causative and one-sided.<sup>107</sup> Thus it is twice reported that Chrysippus maintained that that which happens because of us is a subclass of that which is fated.<sup>108</sup> Since

<sup>103</sup>  $\Pi\alpha\rho' \eta\mu\acute{\alpha}\varsigma$  in Eus. *Praep. ev.* 6.8.2, 6, 23, 30, 32, 33, 34, 38;  $\acute{\epsilon}\xi \eta\mu\acute{\omega}\nu$  in 6.8.26. We do find  $\acute{\epsilon}\phi' \eta\mu\acute{\iota}\nu$  once in his criticism of Chrysippus in Eus. *Praep. ev.* 4.3.10, used as two-sided.

<sup>104</sup> e.g. DL 10.133; Epicurus, *Nat.*, liber incertus, 34.26 6, 12 (Arrighetti), Philod. *Sign.* 36.14. Cf. also [Plut.] *Epit.* 1.27 (DD 322.5–14), SE *M* 5.46–8. And perhaps,  $\pi\alpha\rho' \alpha\upsilon\tau\acute{o}\upsilon\varsigma$  in Gell. *NA* 7.2.12, if one follows V, see above 6.3.3.

<sup>105</sup> The use of  $\pi\alpha\rho' \eta\mu\acute{\alpha}\varsigma$  is widened by allowing some transitivity: some fact in the world obtains 'because of me', if either I brought it about directly (e.g. my actions), or if what I did was a causally necessary condition of that fact's obtaining, see 5.3.2.

<sup>106</sup> The phrase  $\pi\alpha\rho\acute{\alpha} c. acc. pers.$ , can presumably also be used as two-sided and potestative, especially when it comes with  $\acute{\epsilon}\iota\text{ν}\alpha\iota$ —cf. e.g. Arist. *EN* III.5 1114<sup>b</sup>16–17.

<sup>107</sup> For the causative, one-sided, use of  $\pi\alpha\rho' \eta\mu\acute{\alpha}\varsigma$  by Epicurus and Epicureans see Bobzien (forthcoming).

<sup>108</sup> Eus. *Praep. ev.* 6.7.33, and with  $\acute{\epsilon}\xi \eta\mu\acute{\omega}\nu$  in 6.7.26.

the things that are fated are occurrents (i.e. things that actually obtain or occur), and 'being fated' implies 'being part of the causal network', here Chrysippus' understanding of *παρ' ἡμᾶς* and *ἐξ ἡμῶν* can only be one-sided and causative.<sup>109</sup> Moreover, *ἐξ ἡμῶν γίγνεσθαι* is used as synonymous with *παρ' ἡμᾶς γίγνεσθαι* (cf. Eus. *Praep. ev.* 6.8.25–6 with 6.8.2 and 6.8.30), and *ἐξ* with *genitivus personae* cannot be used as potestative, two-sided.

The Diogenianus passage is important in still another respect. It names the goal of Chrysippus' second book on fate: to show both that everything happens in accordance with fate, and that some things happen because of us (*γίγνεσθαι παρ' ἡμᾶς Praep. ev.* 6.8.2, *ἐξ ἡμῶν Praep. ev.* 6.8.25–6). Thus Chrysippus' primary purpose was to ensure that in his system our own causal responsibility for certain things is preserved.<sup>110</sup> This is precisely what the Gellius, Cicero, and Plutarch passages suggested, too.

It thus seems that, in his discussion of fate, Chrysippus made use both of a concept of what happens because of us (*παρ' ἡμᾶς* / *ἐξ ἡμῶν γίγνεσθαι*) and of a concept of what is in our power (*ἐφ' ἡμῖν εἶναι* / *esse in nostra potestate*); and that he intended to show the compatibility of the former with the Fate Principle, whereas he considered the latter as a necessary condition for moral responsibility (Cic. *Fat.* 41–3). It remains to sort out the relation between the two concepts. It is plausible to assume that everything that happens because of us in the required sense must have been in our power before it happened,<sup>111</sup> and presumably it must belong to the class of things that are thought to be generally in our power (reading (ii), above).

More specifically, for Chrysippus, this relation seems to come out as follows: It is a sufficient condition for an action to happen because of us that the individual nature of our minds is its cause, as described in Cic. *Fat.* 42–3. For something to happen because of us in this way, it must be

<sup>109</sup> Equally, the—possibly Chrysippean—general characterization of the things *παρ' ἡμᾶς* in Diogenianus (Eus. *Praep. ev.* 6.8.30) is in line with the one-sided, causative understanding of *παρ' ἡμᾶς*: 'If he (i.e. Chrysippus?) would call those things because of us which come to be from our making an effort and working towards a goal, or which because of our being negligent and careless are not accomplished' (εἴ γε . . . καλεῖν προεἰληφε [i.e. Chrysippus?]) . . . *παρ' ἡμᾶς δὲ ὅσα ἐκ τοῦ σπουδάζειν ἡμᾶς καὶ ἐνεργεῖν ἐπὶ τέλος ἔρχεται ἢ παρὰ τὸ ἀμελεῖν καὶ ῥαθυμεῖν οὐκ ἐπιτελεῖται*; e.g. if I take care of my coat, and it is thus preserved in a good condition, its being thus preserved causally depends on me; if on the other hand I am careless about my jumper and I do not succeed in preserving it (it could be eaten by moths, for instance), then its being not preserved causally depends on me.

<sup>110</sup> This fact speaks against the suggestion that in Eus. *Praep. ev.* 6.8 Diogenianus substituted the 'Epicurean' *παρ' ἡμᾶς* for the 'Stoic' *ἐφ' ἡμῖν*; or at least it suggests that whatever phrase or phrases for 'depending on s.o.' Chrysippus originally used in this context, they were one-sided and causative.

<sup>111</sup> SE *M* 5.48, the only passage I have found which uses the two expressions together, treats *παρ' ἡμᾶς* as one-sided causative and *ἐπὶ c. dat. pers.* as two-sided potestative, and implies such a relation between the two.

ensured *that the nature of the mind can actually be causally effective*. This requires that what happens because of us must not be forced or externally determined, but must be in the power of the agent. It is here that the Stoic faculty of assent (which was central to Chrysippus' argumentation in Cic. *Fat.* 42–3 and Plut. *Stoic. Rep.* 1055f–1056a) has its place in the argument. It is a two-sided capacity of the mind (the mind can either give or withhold assent), and whatever motion is the result of the use of this capacity, is—because of the very nature of this capacity—not a forced or externally determined motion, but one for which the agent bears causal responsibility. The key to Chrysippus' compatibilism is in the end not so much his understanding of phrases like ἐφ' ἡμῶν or παρ' ἡμᾶς, but the function he gives to the faculty of assent in this context.

How does the faculty of assent ensure that our assents and actions are in our power? Let me start with a conception of how such a faculty could work, which I call the 'decision-maker model' of the mind. This model is based on the indeterminist libertarian assumption that agents are undetermined in their choices *by external and internal causal factors* alike. The idea is that *here*, on the one hand, are the possible (causal) influence factors, some external to the agent, like the environment, some internal to the agent, like the agent's dispositions; *there* on the other hand, am I, myself, the one who decides what actions to perform, detached not only from external impacts, but also from my past experiences, my present character and dispositions, perhaps even from my memories and factual beliefs. That is, I am thought to make a decision in virtue of the fact that my decision-making faculty (e.g. the will, or reason, or the rational part of the soul) decides; and this decision-making faculty is assumed to be detached from the rest of the person, including character and dispositions. It reigns as it were over the other parts of the person, and, importantly, can decide against them. The Stoic faculty of assent could be imagined to be such a decision-making faculty. It would then be separate and causally independent of large parts of the mind (διάνοια, ἡγεμονικόν), and would in the case of an incoming impression make its own, independent, decision as to whether or not assent is to be given. Now, I believe that this decision-maker model is a false way of imagining how the Stoic faculty of assent works.

In contrast, the early Stoic<sup>112</sup> model of assent and agency seems rather to have been as follows: According to the Stoics, the mind consists of pneuma, and it is unitary, that is, it has no separable parts (in particular, it has no distinct rational and desiderative parts). As a consequence, it becomes impossible that one part of the mind fights against or enslaves

<sup>112</sup> Panaetius, and certainly Posidonius, had a different view. On the following pages 'Stoic' refers to the early Stoics only.

or decides against other parts of the mind. A person's character, dispositions, emotions, desires, and beliefs are all manifestations of the *same* pneuma of the mind. Moreover, they are all uniform. For they are all reducible to the beliefs a person holds, and the degree of firmness with which each belief is held. (For the Stoics volitions, emotions, and desires are kinds of beliefs.)

What beliefs a person holds depends on which of their impressions they have assented to. And whether or not assent is given to an impression depends on the individual nature of the person's mind (Cic. *Fat.* 43, see 6.3.3). The individual nature of the mind is a set of qualities (ποιότητες, i.e. stable properties) of the mind, including the person's moral character (6.3.3). We do not know for sure whether it was thought to encompass all qualities of the mind. But for our present question it is immaterial whether we can determine the exact constitution of the individual nature of the mind. What matters is (i) that it includes a person's moral character, and (ii) that for the purposes of moral accountability the agent is identified with that nature. This is clear from the fact that something is understood to depend on me (ἐπ' ἐμοί) or to be in my power in virtue of the fact that it depends on this nature. For it is a sufficient condition for something to be in *my* power if *the individual nature of my mind* is causally responsible for its occurrence.

It follows from this that the faculty of assent (by means of which moral responsibility was to be secured) cannot decide against this individual nature of the mind. Or, more precisely, the agent, by making use of this faculty, cannot decide against the individual nature of their mind. The best way of envisaging the dependency of the faculty of assent on the individual nature of the mind is perhaps to assume that it is *a disposition of this nature as a whole*; or put negatively, that there is no subpart of the nature, nor a part separate from it, which has the disposition to give assent. Here it is useful to remember Iamblichus' report that 'just as an apple has sweetness and fragrance in the same body, so the ruling part of the soul combines impression, assent, impulse, and reason in the same body.' (Stob. *Ecl.* I 368.17–20). But in any event, the faculty is not separable from this nature of the mind.

Someone may ask, 'but don't the Stoics allow for the possibility that I act against this nature of my mind; e.g. when I am drunk, and certain circumstances hold, I assent to  $\phi$ -ing, and  $\phi$ ; whereas when I am sober (and in accord with my nature), and such circumstances hold, I never assent to  $\phi$ -ing.' The answer to such questions is: this is the wrong way of looking at the individual nature of the mind. Rather, the individual nature of my mind is such that when I am drunk, and certain circumstances hold, I assent to  $\phi$ -ing, whereas when I am sober I never do. This kind of reply works in the case of all my actions. The reason for this is that according



to the Stoics the only way to act is via assent to an impulsive impression, and assent is a function of the individual nature of the mind.

We can see that with such a model of mind and agency the conception of moral responsibility based on indeterminist freedom (MR1) becomes nonsensical. For Chrysippus gave the causal dependency of assent on the individual nature of the mind as *the reason why* assent depends on us (Cic. *Fat.* 42–3) and hence why the agent can be held morally responsible. But if the fact that whether I assent causally depends on the nature of my mind is the reason for my being morally responsible, then, if it were possible for me to decide and act against this nature, I would by doing so remove a necessary condition for the possibility of my being held responsible. That is, what is a necessary condition for MR1 turns out to make impossible moral responsibility as conceived of by Chrysippus (i.e. in the sense of MR2).

But what is the point of having the two-sided capacity of assent (to give or withhold it) as warranty for the fact that our actions are in our power, if whether or not we assent is causally determined by what the individual nature of our minds is like? In order to see in what way the Stoics thought the two-sided capacity of assent ensures that our assents and actions are in our power we have to look at their theory of human ontogenesis.

Like non-human animals, human beings, before they develop reason, do not have a faculty of assent. In the ruling part of their souls, they have the ability for (non-rational) impression and for (non-rational) impulse, and their actions are determined by those two. Non-rational impulses are nothing but impressions of something as attractive or as repulsive (i.e. non-rational impulsive impressions). Thus if a small child has an impression of something, say food, as desirable, then it has an impulse directed towards that food, and this impulse will make it act, i.e. will make it try and get the food. In this way a child's externally induced impulsive impressions will make it act. There is nothing in the child's ruling part of the soul that could keep this from happening.

When human beings develop reason, this changes. Reason enables them to realize that impressions can be inadequate, or false. Something that appears good or desirable may not in fact be so. Together with this 'critical distance' from their impressions, human beings obtain the ability to interrupt the immediate causal chain from impulsive impression to action. An impulsive impression will lead to action only if the person has assented to it. If an impulsive impression appears inadequate or false to the person, they can withhold assent. And when they withhold assent, they will not act.<sup>113</sup>

<sup>113</sup> Cf. M. Frede 1993, in which he describes the Stoic view of the development of reason and rationality in human beings with exemplary clarity.

We can thus see the important function the two-sided capacity of assent has in the Stoic theory. Its role is not to enable a person to decide independently of their desires and beliefs, or to ensure indeterminist freedom of decision. Rather, the two-sided capacity of assent elevates rational creatures from non-rational ones. Without such a capacity, a creature's impulsive impressions fully determine its actions (i.e. what it will try to do, and do, if nothing interferes).<sup>114</sup> The capacity of assent enables the creature to interrupt this pattern. The reason why it can do so is that it is rational, i.e. has at its disposal a dichotomy of values (true/false or adequate/inadequate) by means of which it can *assess* its impressions, and accordingly refuse to accept them.

Rational creatures thus can interrupt the causal chain impulsive impression—action by taking an evaluative stance towards their impressions, and by consequently rejecting 'inadequate' impressions, and not acting on them. Now the moral character, as it were, of a person consists in the individual 'profile' of the individual nature of their mind by which it is determined to which impressions they give assent. A wise person gives assent only to true or adequate impressions (6.3.1). A person's morality is thus nothing but a dimension of their rationality. We can then see why Chrysippus thinks that our capacity of assent ensures that there are things for which we are morally responsible, and which happen because of us (*παρ' ἡμᾶς*), and are in our power (*ἐφ' ἡμῖν*). The reason is that we, *qua* rational beings, have the possibility of critically assessing the world, and to direct our actions accordingly. Thus our actions are in our power in a way they are not for animals / non-rational creatures. And moral responsibility can be attached to our actions, since our moral character manifests itself in them, since it was causally operative in bringing them about. The faculty of assent is moreover the only way we, *qua* rational, moral beings, can be in control over what happens in the world. For it is via this faculty only that the individual nature of our minds can become causally operative in the external world.<sup>115</sup>

We can then finally see what sort of freedom it is that Chrysippus presupposes for moral responsibility. This concept of freedom is neither the same as the concept of that which is in our power (*ἐφ' ἡμῖν*), nor as the concept of that which happens because of us (*παρ' ἡμᾶς*). It is presupposed for both of them.

<sup>114</sup> All behaviour would be a function of external influences and instincts.

<sup>115</sup> If Chrysippus used the expression *ἐφ' ἡμῖν* (as is suggested by Cicero's *in nostra potestate*), I do not know which element or elements of the faculty of assent he thought were covered by it: the fact that we *qua* rational beings are the decisive causal factor? (causative) Or the fact that the capacity of assent is a two-sided capacity? (potestative) Or the fact that we are in control over our actions in a way non-rational animals are not? (potestative, but in a different sense).

Moral responsibility for an action is based directly on a particular kind of causal dependency: An action happens because of me if I (*qua* rational being) am causally responsible for it. This causal dependency presupposes that whether I act depends on me in the sense that, when external stimuli suggest some action, whether or not I act depends on what beliefs I have, and not on those stimuli. This is possible, because I have the capacity to give or withhold assent. The mere fact that I have and use my faculty of assent, renders my assents in my power. At the same time it guarantees me freedom from being externally determined or forced in my assents. If an action is the result of an act of assent, the action, too, is not externally forced. (Although it is of course always possible that external factors prevent me from performing an action which I decided to perform.) The freedom involved is thus freedom from being forced (F4 above) and freedom from being externally determined (F5) in my actions.<sup>116</sup>

Such a concept of freedom was implied by Chrysippus' defence of that which depends on us (6.3.3). It is also implied by Chrysippus' concept of contingency as defined in his modal theory (3.1.5): if one disregards the fact that he defined the modalities for propositions, not for actions, one can say: my  $\phi$ -ing is contingent (possible and non-necessary) if I am able to  $\phi$ , and I am able not to  $\phi$ , and external circumstances neither force me to  $\phi$  nor prevent me from  $\phi$ -ing.<sup>117</sup> The fact remains that even this kind of two-sided freedom is never discussed directly in our texts on the compatibility of fate and moral responsibility, and that there was no one word for it. The real problem was to secure causal responsibility of the rational agent, and for this the freedom from external force was just one of several necessary conditions.

### 6.3.6 *Moral responsibility and the determination of character*

For philosophers who believe that persons are free in that they can make decisions and act independently of and even against their character, the question of whether a person's character is predetermined is of minor or no importance for the issue of moral responsibility. By contrast, if, like Chrysippus, one does not subscribe to the 'decision-maker' model of the person, but rather identifies persons with their overall character or with

<sup>116</sup> In modern terms, this kind of freedom comes closest to what is sometimes called 'freedom of action' (the freedom to act as one chooses to act) or 'physical freedom' (the absence of physical force and restraints).

<sup>117</sup> This kind of freedom may have been expressed by some Stoics as two-sided possibility (it is possible to  $\phi$  and it is possible not to  $\phi$ ), with Chrysippus' notion of possibility. Cf. e.g. Origen, *Cels.* II 20 (340.55–342.61), where the claim is that it was possible for Laius to father a child, and that it was possible for him not to do so. Chrysippus' concept of possibility is made use of shortly after (*ibid.* 344.85–7).

the individual nature of their mind,<sup>118</sup> and maintains that this nature or overall character is the ultimate determinant of one's decisions, the situation is different. A common objection to justifications of moral responsibility such as that of Chrysippus is that all that has been achieved is that the problem has been shifted one step back. The new question is whether we are morally responsible for our own overall character or nature of the mind.

Compatibilists like Chrysippus are thought to find themselves at this point in the following dilemma: If our own individual nature is in turn fully determined by external necessitating influences, the individual nature is not suitable as a basis for holding us responsible for our actions, and we are back to step one. If on the other hand persons are claimed to be morally responsible because they themselves can influence their individual nature by their beliefs, decisions, and actions, there arises a vicious circle: for it has been assumed beforehand that the beliefs, decisions, and actions are determined essentially by the persons' nature.

This is the problem a modern philosopher may confront Chrysippus with. But what about the ancients? Was Chrysippus aware of this difficulty, and did he respond to it?<sup>119</sup> and do we have any evidence that his opponents spotted such a weakness in his system? Answers to these questions are not easily provided, since our evidence is, as so often, very patchy. There is no evidence at all that Chrysippus or any other early Stoic grappled with the problem of character determination and moral responsibility, let alone the problem of character determination and free will. There is one text, Cic. *Fat.* 7–11, in which an opponent of Chrysippus' brings up such a problem. There is further some evidence that later Stoics were confronted with and replied to criticism which bears some resemblance to the above-mentioned dilemma. This is discussed in 8.7.

In order to trace Chrysippus' view on moral responsibility and character determination, we need to examine the early Stoic position on how the individual nature of the mind develops, how far and in which way it is predetermined, and whether and how far it depends on us to develop or change it.

We have seen in previous sections (6.3.3 and 6.3.5) that the individual nature of an adult person's mind is the *pneuma* of the mind insofar as it is a set of qualities (*ποιότητες*), i.e. a combination of stable and continuous properties and dispositions, including the rationality and moral character of the individual. Some such qualities, as listed by Chrysippus, are a liking for sweet or for bitter things; licentiousness, a propensity to anger, cruelty, arrogance; the absence of such inclinations (Cic. *Fat.* 8,

<sup>118</sup> In this section, the expressions 'nature of the mind' and 'a person's nature' are used as abbreviations of 'the individual nature of the person's mind'.

<sup>119</sup> Aristotle was aware of such a problem and discussed it—cf. *EN* III.5.

text quoted below). For the question of moral responsibility for one's character only the nature of the *adult* human mind is of relevance,<sup>120</sup> since in the Stoic view only they have rationality and a moral dimension to their nature and overall character. But although development of one's overall character in adulthood is possible, what the adult human's mind is like on the very threshold to adulthood will depend on the influences the human soul has been affected by prior to this moment. We thus need to consider the character development of the human being from its very beginning. For convenience, I divide up the external influence factors into hereditary and environmental ones.

The Stoics recognized hereditary inputs from the parents (the father) to the children: (in the context of proving that the soul is corporeal) Cleanthes stated that there is such impact, since there is similarity between parents and children. This similarity concerns not only their physiognomy, but also their character traits (ἥθη) their emotions (πάθη), and dispositions (διαθέσεις) (Nem. *Nat. hom.* 20.14–17 Morani; Tertullian, *An.* 5.4, 787.17–19).<sup>121</sup> There is no reason to assume that Chrysippus disagreed with Cleanthes on the point of heredity of character. For—in an argument designed to prove that the soul has come to be, and has come to be after the body—Chrysippus similarly uses the fact that children resemble their parents both in their habits (τρόπος) and in their character (ἥθος) (Plut. *Stoic. rep.* 1053d). Since character traits and mental dispositions are all part of the human mind, these passages attest that the early Stoics acknowledged hereditary impacts on the individual nature of the human mind.

We obtain more specific information about these influences from the following anonymous Stoic view about human semen:

They state that semen is that which is able to generate offspring formed like the parent; and that human semen, which the human parent emits in a moist vehicle, is mixed with parts of the soul, and blended in the same ratio as in the parents.<sup>122</sup> (DL 7.158–9)

This passage suggests that the characteristics of the parent's soul will be formed in that ratio in the children, and that the Stoics explained this by the fact that the children develop from the sperm. This helps us to understand how the Stoics thought it possible that character traits and dispositions are hereditary.<sup>123</sup>

<sup>120</sup> There is disagreement in the sources whether adulthood starts at the age of seven or fourteen; cf. Stob. *Ecl.* I 317.21–4, [Plut.] *Epit.* 4.11.4 (DD 400.23–6).

<sup>121</sup> Cf. Cic. *Tusc.* I 79, where Panaetius makes the same point.

<sup>122</sup> Σπέρμα δὲ λέγουσιν εἶναι τὸ οἷον τε γεννᾶν τοιαῦτ' ἀφ' οἷου καὶ αὐτὸ ἀπεκρίθῃ ἀνθρώπου δὲ σπέρμα, ὃ μεθίσιν ὁ ἄνθρωπος μεθ' ὑγροῦ, συγκρινᾶσθαι τοῖς τῆς ψυχῆς μέρεσι κατὰ μίγμον τῶν τῶν προγόνων λόγου.

<sup>123</sup> Cf. also Hierocles, 1.5–33, and Hahn 1994, 223–4, for the role of σπερματικοὶ λόγοι in human development.

But we have no reason to assume that heredity was understood to determine a person's nature entirely. In particular—in line with Stoic ethics—there is no mention of inherited *moral* qualities (see below). There is also no information about whether and how far the early Stoics thought inherited features of one's character could be changed. Later, Panaetius' four-personae theory suggests that he thought that one can strengthen and develop one's inborn individual dispositions to a certain degree (Cic. *Off.* I 107, 112, 115, 119–20); and Seneca maintained that one's inborn nature is difficult to alter, and that change is limited by the specific mixture of elements in the individual's soul (Sen. *Ira* 20.2).

By environmental impacts, in its widest sense, I understand anything that has an influence on the nature of a person's mind and is not hereditary. There are, however, essential differences between those environmental impacts that influence a person's mind without an involvement of the person's faculty of assent, and those which are channelled via impressions and acts of assent on the person's part. Assentless influences can be either prenatal or postnatal, and the latter can be at work either before or after the onset of adulthood. Impacts brought about via assent can evidently only be experienced by adult human beings. Of assentless influences Chrysippus seems to have acknowledged the climate to have an impact on people's character (Cic. *Fat.* 8–9, partly quoted below), and perhaps also the stars (*ibid.*).<sup>124</sup>

Best attested is the impact the Stoics think the environment has on a person's moral development. The Stoics do not assume that one is born with certain moral dispositions. Rather, we are all born neither good nor bad. One reason for this is that, since we are not yet rational beings, we cannot yet have moral qualities. But the early Stoics seem not to postulate any inherited or other prenatal individual 'proto-moral tendencies' either. When we are born, we are all equally morally 'unperverted'. Nature gives us predispositions or starting-points that are untinted by vice (DL 7.89).

In a passage in Gellius (*NA* 7.2.8) on which we have touched briefly above (6.3.1), Chrysippus is reported to have distinguished two types of people on the grounds of their nature or character and its development. These two types are: first, those who have been 'formed in a healthy and beneficial way in the beginning through nature'. We are not told whether this was thought to have happened before birth or in childhood, and whether it extended into early adulthood; second, those people who are 'uncouth, uneducated, and uncultured' and 'not supported by good

<sup>124</sup> This passage is, however, very difficult to assess. Cicero's mention of the stars may go back to Posidonius, whose view on astrology had been discussed just before (Cic. *Fat.* 5–6), and it is unclear whether Chrysippus considered climatic and astrological influences as pre-natal.

character qualities'. Here we can assume that their nature is in part the result of lack of proper education, and of adverse environmental influences after birth.

Diogenes Laertius reports that the Stoics distinguished two main sources of moral perversion of human beings: the 'persuasiveness of external affairs' and 'the influence of associates'.<sup>125</sup> Whether these were mainly influences in childhood or in adulthood is again not clear. The influence of other people and of alluring external things on adults presumably requires, at least sometimes, the involvement of the person's assent. And in as far as people assent, Chrysippus could have held them responsible for these changes of their nature. However, these changes are not usually intentional; that is, the individuals do not necessarily envisage the alteration as desirable and consciously work to bring it about. ('Associates' may persuade someone to try out drugs, and the taking of drugs may lead to criminal behaviour and eventually to a disposition for such behaviour, but this does not imply that the individual ever aimed at developing a disposition for criminal behaviour.)

But the Stoics also provide for the possibility of *intentional* changes of the nature of one's mind. We have evidence that they considered both the development of certain skills, and the working towards moral improvement. In either case teaching is an important external influence factor, since it is through teaching that the individual is given the appropriate impulsive impressions for assent. The skill of the grammarian (or literate person) is a quality of the mind, which is developed by reception and training (Simp. *Cat.* 214.31–4).<sup>126</sup> Similarly, once one has reached adulthood, one can intentionally influence a change of one's moral character—at least to the better: it is a major tenet of Stoic ethics that virtue is teachable (DL 7.91, cf. also Origen, *Princ.* III 1.4), and that moral progress is possible (DL, *ibid.*). On the other hand, Seneca remarks that vices that are developed in one's youth are hard to get rid of (Seneca *Ira* 19.1).

Having put the various scraps of evidence together, we see that the Stoics had a fairly complex picture of character formation, development, and determination, which includes hereditary and environmental factors, intentional and non-intentional changes of one's dispositions, and concerns moral and non-moral dispositions and character traits alike.

The next question is to what extent the individual nature of the human mind is predetermined. We know from Cic. *Fat.* 41–3 that—since every change has an antecedent cause—the nature of the mind must be

<sup>125</sup> Cf. DL 7.89, διὰ τὰς τῶν ἔξωθεν πραγματειῶν πιθανότητας and διὰ τὴν κατήχησιν τῶν συνόντων. See Scott 1995, 187–90 and 201–10 for a thorough discussion of the Stoic theory of human moral development, and in particular on the question of the innateness of predispositions to virtuous behaviour and to the formation of moral concepts.

<sup>126</sup> Ὡς γὰρ εἰς γραμματικὸς ἐκ ποιῆς ἀναλήψεως καὶ συγγυμνασίας ἐμμόνως ἔχει κατὰ διαφορὰν, cf. *Cat.* 212.12–213.1 for this being a quality (ποιότης).

predetermined in the sense that any change that contributed to its development had an antecedent cause (6.3.2 and 3). Chrysippus appears also to have argued specifically for the complete determination of people's natures by employing his theory of 'sympathy', i.e. of the interrelation and influence of all things in the universe.<sup>127</sup> In this context he tried to explain the complexity and variation in people's natures by differences in the antecedent causes (e.g. the climate and the position of the stars) by which they are brought about:<sup>128</sup>

But since there are differences in the natures of human beings: some enjoy sweet things, others slightly bitter ones; some are licentious, some prone to aggression, or cruel, or haughty, but others recoil from such vices; so since—he says—one nature differs so much from another, what is there surprising if these differences are brought about by causes that differ from one another?<sup>129</sup> (Cic. *Fat.* 8)

Note the similarity of this argument to Chrysippus' general principle in Plutarch (*Stoic. rep.* 1045c) that different effects require a difference in causes (1.3.3).

Given that any development of our mind's nature is determined by antecedent causes, the next following question is whether the nature of our minds depends on us. Chrysippus' answer to this can be gleaned from the above examination of environmental impacts. Since the distinctive feature of things depending on us is whether they involve our assent (6.3.5), the problem translates into the question of whether our mind's nature is the result of our acts of assent. And to this the answer is 'yes', insofar as by our own assenting to theoretical and impulsive impressions we acquire beliefs and perform or refrain from certain types of actions, which in the long run will form or alter our 'habits' (ἔξεις) and dispositions (διαθέσεις). However, once again, we have no detailed information about *how far* the Stoics thought this possible, whether everyone was considered equally teachable and capable of change, and whether the teachability remains the same at any stage of a person's life. In any event, the model Chrysippus worked with concerning how human beings themselves influence what sort of things they do, is not that (undetermined by their character traits, etc.) they decide freely between alternative courses of actions. Rather, corresponding to their respective dispositions people have

<sup>127</sup> The whole passage Cic. *Fat.* 7–11 is introduced as a reply to Chrysippus' claims about sympathy, see *Fat.* 7.

<sup>128</sup> See above, n. 124. Cic. *Fat.* 9–10 makes it clear that Chrysippus has antecedent causes in mind.

<sup>129</sup> At enim, quoniam in naturis hominum dissimilitudines sunt, ut alios dulcia alios subamara delectent, alii libidinosi alii iracundi aut crudeles aut superbi sint, alii <a> talibus vitiis abhorreant—quoniam igitur, inquit, tantum natura a natura distat, quid mirum est has dissimilitudines ex differentibus causis esse factas?



tendencies to act in certain ways, and in order to act differently, they have to *change their dispositions*, the individual nature of their minds—e.g. in a lengthy process of moral education.

There are no signs that Chrysippus was aware of or worried about any problem arising from the predetermination of the individual nature of a person's mind in connection with his stance that this nature determines the person's action. The early Stoics may simply not have seen a problem here (see below). But Cicero's criticism in *Fat.* 9–11 suggests that some of their opponents did. Cicero seems to take issue with Chrysippus over his claim about universal 'sympathy', that differences in people's natures are grounded in a difference in the causes which bring them about.

Cicero in fact makes two separate and rather different points, although in his presentation they run into each other. The view Cicero objects to is that human behaviour is fully determined by natural antecedent causes. By natural antecedent causes Cicero means those causes, presumably prior to a person's birth, which predetermine a person's individual nature or character traits.<sup>130</sup>

His first point, made in *Fat.* 9, is that, although the climate may influence and determine general character traits, it does not determine whether we perform any particular action, like sitting or walking, at any particular time. Such natural causes, he claims, are not principal antecedent causes of actions.

This criticism seems to be at cross purposes with what we know from Chrysippus. It is implied that Chrysippus holds (i) that natural antecedent causes determine our actions directly via our nature, and that he is thus committed to (ii), that our actions do not depend on us. Now, we know that Chrysippus maintains that our actions depend on us, and thus rejects (ii). Thus Cicero must have inferred from Chrysippus' claims that our nature is determined by antecedent causes, and our actions are determined primarily by our nature, that for Chrysippus there cannot be any things that depend on us. Presumably he presupposed some principle of transitivity of determination together with the assumption that if something is predetermined it cannot depend on us—an assumption standardly invoked against the Stoics, but not accepted by them.

But even assumption (i) seems not to be fully warranted. For Chrysippus readily agrees that our actions are not determined by our character traits through some sort of automatic stimulus-response mechanism. Rather, he maintains first that it is the nature of our own minds which (co-)determines our actions, and that this nature encompasses our rationality, and is not some 'mindless' set of dispositions to act in certain ways; and second, that our actions are elicited by externally induced impressions, and the rational

<sup>130</sup> The expression 'natural causes' is not known for the early Stoics.

faculty of assent is interposed between our nature and the impressions on the one hand, and the action on the other. (It is the person who responds, not the climate.) This comes out clearly in Cic. *Fat.* 40–3 (6.3.3). We do not know whether Chrysippus' reasoning in this later passage is a response to criticism like Cicero's in *Fat.* 9, or alternatively, whether Cicero just polemically ignores these elements of Chrysippus' psychological theory.

Cicero's second point of criticism (in *Fat.* 10–11), too, seems not quite to hit the mark. Unlike the first, it does not concern individual actions, but the question of the possibility of influencing or changing one's inborn nature or character traits; and this time the emphasis is on *moral* qualities. Chrysippus is again assumed to hold that natural antecedent causes determine one's general character traits, and that these general character traits, in turn, in stimulus-response fashion, determine one's actions. This is contrasted with the view that it is possible for people to influence and change their nature or character traits, up to a point, by way of will, training, and discipline. Stilpo and his immaculate moral behaviour, and Socrates, wrongly diagnosed by the physiognomist Zopyrus as having certain vices, are adduced as examples of men who succeeded in bringing their immoral natural inclinations fully under control, and even managed to eradicate them.

As we have seen above (6.3.5), Chrysippus would not describe the examples in the way Cicero does. The essential difference between Cicero and Chrysippus is that they base their theory of character development and action on different conceptions of a person and a person's nature (*φύσις/natura*). And this difference in conception is, presumably, not a coincidence, but is connected with different notions of the soul.

For Chrysippus, natural character traits, assent, and rationality are all manifested in the mind (being different aspects of the mind's individual nature), and the nature of the person's mind seems to include all of them. Thus Chrysippus would not claim that one's actions are determined by one's 'inborn' character traits. Rather, usually some actions will be in accordance with these traits, others will not. For what is decisive for how someone responds to the externally induced impressions is not this 'inborn' nature, but the nature of the person's mind, which is identified with the person. The inborn character traits are neither detachable from the nature of the mind, nor are they the same as this nature. They are some of its many aspects, which together result in a specific pattern of tension of the mind's *pneuma*. Whether a person assents and acts depends on this state of tension of the entire individual nature of the person's mind at the time.

Cicero, on the other hand, detaches the agents from their inborn and externally determined character traits, which he identifies with their

nature,<sup>131</sup> and identifies the agents with their rationality or their *voluntas* (*Fat.* 9). The view he presents becomes clearer in the two parallel passages to the Zopyrus anecdote. In *Alex. Fat.* 171.11–17 Socrates is said to have responded to Zopyrus by saying that so far as his nature (*φύσις*) was concerned, he would be just as Zopyrus claimed, but he had got better through the practice (*ἄσκησις*) of philosophy. In *Cic. Tusc.* 4.80–1 the anecdote is introduced by ‘but those who are said to be irascible by nature . . . are none the less curable . . .’ (‘*Qui autem natura dicuntur iracundi . . . sanabiles tamen . . .*’), and Socrates is said to have responded to Zopyrus by saying that he was naturally inclined to the vices Zopyrus had named, ‘but had rid himself from them by reason’ (‘*sed ratione a se deiecta*’). The view propounded by Cicero works from the model of a soul with several parts, and identifies the person or ‘essential self’ with the rational part of the person’s soul. Thus in *Fat.* 8–11, Cicero has taken the term ‘nature’ not in the early Stoic way, but in a Peripatetic or later Stoic way, where it is contrasted with reason. His second point of criticism is really based on a different metaphysical foundation, a different concept of the soul, and hence on a misinterpretation of Chrysippus’ theory.

But note that Cicero, like Chrysippus, does not invoke the idea of a causally undetermined deciding self. (The question what determines what the rational part of the soul is like in a person is left open in Cicero.) It is reason, which works via practice and learning, which extirpates the natural vices (*Fat.* 11), i.e. *changes* one’s nature, so that one’s actions are no longer vicious. That is, Cicero, too, insinuates that in order to alter one’s actions, one has first to alter one’s nature, although the text is not absolutely clear here. (*Fat.* 10, *edomitam et compressam* can be read as saying the nature is still there, but continuously held in check by reason.)

A better objection, that would affect Chrysippus’ theory, since it is based on Chrysippus’ own concept of agency, and which we find in modern discussions, would perhaps be this: You, Chrysippus, say that our actions depend on us because they are determined not by external causes, but by our nature. But our actions can only depend on us if our nature is not in turn determined by external causes. You hold that our nature is at least in part not determined by external causes, but by our own assents, actions, etc. However, you started out by maintaining that our assents and our actions are determined by our nature. Thus, in order to prove that our actions depend on us, we need to assume that our nature depends on us; and in order to prove that our nature depends on us, we need to assume that our (previous) actions depended on us; for which we have to assume that our nature (as it previously was) depended on us; and so forth; and we will end with the state of our nature or character as it was at the

<sup>131</sup> Similarly *Alex. Fat.* 170.18–19 equates human nature with character (*ἦθος*).

outset of adulthood, by which our first assents and actions are determined. But the state of our nature *then* cannot, in turn, depend on us as a result of our assents and actions, since there are no such assents and actions beforehand.

This is a powerful criticism. But we have no evidence that any such objection was made against Chrysippus, or anticipated by him. It may just have been lost, as so much else has. But there may also be philosophical grounds why we do not find it. Remember that the problem of Chrysippus and his opponents was not that of the causal undeterminedness of a person's decisions. Rather, their problem was how the agent (and that includes the nature of the agent's mind) can be held responsible if fate determines everything.

We have seen that one cannot justifiably object that for Chrysippus the hereditary and environmental impacts determine the agents' actions via the nature of their minds as some kind of automatic stimulus-response mechanism which completely by-passes the person so that the person therefore cannot be held responsible. For responsibility depends essentially on the interposition of assent, a motion of the soul that involves rationality.

The above objection accuses Chrysippus of allowing moral responsibility ultimately to be based on an agent's state of mind at the threshold of adulthood, as it was predetermined by environmental and hereditary influences up to then, and not on human assent, as Chrysippus claimed. Let us concede for the moment that agents can be held morally accountable for actions that are based on assent, and thus on the agent's rationality; and let us then turn the tables and ask: why do *we* (or some of us at any rate) find it difficult to accept that whether, and to what extent, we make moral progress in our lives is contingent upon our starting position at the beginning of adulthood? The main reasons, I surmise, are (i) that we would have no say in how favourable or unfavourable our initial position for moral development is, and (ii) we are not ready to accept the 'unfairness' contained in differing starting positions. Hence—we tend to think—it would be *unfair* to blame people, if subsequently they become immoral people. But this reaction is not necessary. One could accept instead that there is at this point an element of luck in the world—just as there is in the cases of health, intelligence, musicality, good looks, etc. where we accept the inequality and may 'congratulate' the lucky ones, pity the less lucky ones, and e.g. in the case of health, attempt to maximize everyone's state of health. Why should this be different in matters of morals? Why could one not take the unequal starting positions as given and consider ethics as having the task of providing the ground on which moral progress can be developed as much as is possible in any individual case, by trying to minimize possible external negative influences (by teaching, education,

etc.)?<sup>132</sup> Blame and punishment for action are in this view not connected with the idea that we all start out with equal chances to become good or bad, but are based on the fact that the agent is an adult, rational, human being who acted voluntarily, as the result of an act of assent.

If the early Stoics had such an attitude, the above objection would not have a grip on their theory of moral responsibility. For the fact that on the threshold of adulthood people have a predetermined character with respect to the chances of development of morality would be irrelevant for the question of moral accountability for their actions.

As I said above, we do not know how Chrysippus would have responded to an objection of the above kind. But his treatment of the differences and development of moral characters in Gell. *NA* 7.2.8 (see 6.3.1 and above) suggests that he would *not* have accepted it, perhaps not understood it, since it is based on a world view different from his. (There he claimed roughly that people whose character is initially fashioned in a healthy way can resist temptations, whereas those who lack a good upbringing tend towards bad actions.) This Gellius passage is part of Chrysippus' reply to the charge that his fate theory allows evil-doers to shift responsibility for their actions away from themselves onto fate. We are not told what the purpose of Chrysippus' mention of character formation is in this context. But we can hazard a good guess. Chrysippus' general concern is to show that *moral* accountability lies in the agent and cannot be shifted from there onto fate. Thus it seems that Chrysippus wanted to *make plausible* his claim that moral accountability is with the agent, by *explaining* how it comes about that people have different natures, the differences being of moral relevance, and which make them react *morally* in different ways to comparable external influences. That is, the emphasis is on explaining how it comes about that the *badness* (i.e. the moral aspect) is located *in the agent*, and that moral accountability hence has to be placed there, too. (For if you give some such empirical explanation of how badness gets into a human being, then it is more difficult to shift responsibility away onto some impersonal power like fate.) So it appears that Chrysippus uses the fact of the initial formation of different characters in order to justify the moral responsibility of the agent—rather than as a possible objection to it. This suggests that the fact that different people start out adulthood with very different positions concerning their moral development was taken as an undisputed fact, rather than as a matter of concern.

This result ties in with the fact that before the rise of Christianity most Greek philosophers (including Aristotle and the Stoics) were generally not committed to equal opportunities for all, and certainly not from birth,

<sup>132</sup> Inwood 1985, 68–9 notes the Stoic emphasis on moral education in this context.

nor were they in any way upset by the idea that most people will never obtain virtue.<sup>133</sup> I surmise that our unease with such positions reflects later social and intellectual developments (Christianity being a significant factor among them), which introduced equality on the level of religion and morality, granting at least in principle the possibility of virtue and salvation to all.

### 6.3.7 *The relation between antecedent causes, fate, and necessity*

What one takes Chrysippus' position on determinism and moral responsibility to be, and how he would fare in comparison with modern compatibilist theories, depend in the end also on one's understanding of the relation Chrysippus assumes between fate, antecedent causes, and necessity. Our sources seem to be open to two alternative types of interpretation of the relation between fate and antecedent causes. One, which I call the 'Identity View', assumes that Chrysippus held that fate is the network of *antecedent* causes. The other, which I call the 'Non-identity View', assumes that fate is the network of the entirety of causes. The textual evidence is far from clear when it comes to deciding between these two types of interpretation. But the purpose of this section is not so much to decide between them, as to bring together the various elements of Chrysippus' theory which are fundamental to his compatibilism, and to show how they can be combined in one theory which is consistent and plausible in the context of early Stoic philosophy as a whole. As will become plain, this can be achieved better with a version of the Non-identity View.

#### 6.3.7.1 *Fate and antecedent causes*

The Identity View is the view that Chrysippus—at least at some time in his life—identified fate with antecedent causes.<sup>134</sup> Since 'fate' (*εἰμαρμένη*) comes always in the singular for Chrysippus, the identity is understood to hold between fate and the totality of antecedent causes. According to this interpretation, what Chrysippus has done in the argument reported in Cic. *Fat.* 41–3 is basically to limit the scope of fate and create some space for the agent and that which depends on us, however without a corresponding change of nomenclature: everything is still called 'fated'. There are deterministic and indeterministic variants of this interpretation.

<sup>133</sup> Aristotle shows no signs of worry about the fact that our natural dispositions for becoming virtuous differ, and that they do not depend on us (*ἐφ' ἡμῶν*), cf. *EN* X.9, esp. 1179<sup>b</sup>21–3.

<sup>134</sup> Cf. e.g. Gould 1967, 18; Long 1970, 261; Frede 1980, 220, 239; Talanga 1986, 134. Scholars who suggest or favour this view usually identify the antecedent causes with the procatactic causes and the internal determining factors with the self-sufficient and cohesive (*συνεκτικός*) causes—which is unsubstantiated (see Bobzien 1998b, sections 2–5), but this can be disregarded in the present context.

The indeterministic variants assume that with his distinction of causes Chrysippus intended to introduce an element of 'true' freedom, such that in the case of human assent fate, *qua* antecedent causes, only prompts the activation of the faculty of assent, but does not determine whether assent is given, and that the agents are ultimately causally undetermined in their decisions whether or not to assent. This interpretation has the shortcomings that (i) it does not square with Chrysippus' concept of 'that which depends on us', and of agency, and that (ii) there is no textual evidence that Chrysippus, in Cic. *Fat.* 40–3 (and parallel passages), was involved in a debate over indeterminist freedom. Moreover (iii), in this interpretation the phrase 'assent is fated' takes on the meaning that assent has an antecedent cause, which, however, does not fully determine it; for fate is taken to be *not* responsible for the assent, except in that it provides a necessary condition. But 'x is fated' would surely be an odd way to express this restricted influence of fate, and on this interpretation it thus seems as if Chrysippus is using some sort of a cheap trick to get around the opponents' objection. ('Retineat fatum' in Cic. *Fat.* 41 certainly suggests that Chrysippus wanted to keep his concept of fate rather than that he wanted to stick to the wording of the Fate Principle, with a significant change of meaning of the phrase 'x is fated'.) In the following I disregard the indeterminist versions of the Identity View.

The deterministic variants assume that fate, i.e. the antecedent causes, prompts each assent by way of impressions; and that fate, i.e. the antecedent causes, is *also* responsible for the nature of each person (at least up to the point when they reach adulthood), since every change is the effect of antecedent causes and the nature of a person's mind is the result of changes, being the result of a combination of hereditary and environmental impacts (cf. 6.3.6). 'x is fated' here means that x is fully determined by fate, alias antecedent causes, only that in cases like assent fate works in part *indirectly* via the person's nature. 'That which depends on us' is then preserved as follows: acts of assent depend on us, since whether we assent is not determined (directly) by fate, but by the nature of the agent's mind itself; and this nature, although in turn the result of antecedent causes and thus fated, is still itself *not* an antecedent cause of the assent (*qua* cause it is simultaneous with the effect), and thus not itself part of fate. Thus the *pneuma* which makes up the nature of the mind, although it is active and a cause, is exempted from being part of fate.

By contrast, the Non-identity View asserts that fate is identical with the totality of all causes, not only antecedent ones. That is, fate includes both internal and external causes, and both causes of (the sustenance of) qualitative states and causes of change or motion (see 1.1.2). In this interpretation the phrase 'x is fated' expresses something like 'x is fully

causally determined, in all its details, by the active power of the universe'; i.e. it keeps its conventional Stoic meaning. Fate is the all-pervading, entire, world pneuma, insofar as this pneuma is causally active.

When  $x$  is a qualitative state of an object, then the active principle or pneuma in the object works as a cause which *sustains* the qualitative features of the object at the time. Qualitative states are fated in the sense of *being upheld* by fate, e.g. in its manifestation as cohesive causes. (States can be said to have antecedent causes only in the indirect sense that they have been *brought about* by antecedent causes, i.e. that the states are the result of a change caused or part-caused by those antecedent causes. It is important not to confound the direct causes of states, which sustain the states and the indirectly responsible causal factors that bring the states about. For without the internal sustaining causes, whatever qualitative state has been brought about by antecedent causes would immediately deteriorate.)

For motions or changes, on the other hand, fate is always involved directly *qua* external antecedent cause. But whenever the nature of the object at which the change takes place is causally co-responsible for the effect,<sup>135</sup> fate is also involved directly *qua* being the causally active nature of that object. For example 'assent  $a$  is fated' implies 'assent  $a$  is fully determined by a combination of an antecedent, external, fate-factor, and an internal fate-factor'. Thus for all motions the logical equivalence holds that a motion is fated precisely when it has an antecedent cause.<sup>136</sup> But this does not mean that fate is identical with the totality of antecedent causes only (see below).

On the Non-identity View, that which depends on us is preserved by Chrysippus' distinction of causes, insofar as we (or the individual nature of our minds) are the main cause of assent, and assent is neither forced nor externally necessitated (see 6.3.5 and 6.3.7.2).

Having set out what I regard as the most plausible versions of the two types of interpretation, I shall now consider the main textual evidence for the Identity View, and then discuss some of its shortcomings. The Identity View is usually grounded on Cic. *Fat.* 40–3, Gell. *NA* 7.2.11, Plut. *Stoic. rep.* 1056b, and sometimes on Cic. *Top.* 59 and [Plut.] *Fat.* 574e; but none of these passages is decisive evidence that the Identity View is what Chrysippus had in mind. I begin with the passages which uncontroversially give Chrysippus' view.

<sup>135</sup> I believe this to be the case in all instances of causation of change (see Bobzien 1998b, section 6) but that is irrelevant for the present point.

<sup>136</sup> The same holds for states in the sense that every qualitative state requires antecedent causes in order to be *brought about*. I am unsure whether Chrysippus had this in mind, too, when he used formulations like 'everything happens ( $\gamma\acute{\iota}\gamma\nu\epsilon\sigma\theta\alpha\iota$ , *fieri*) by antecedent causes'.



First Cic. *Fat.* 40–3. The Stoic view of the relation between antecedent causes and fate formed the basis of the opponents' argument (*Fat.* 40, see 6.2.2) and of Chrysippus' reply to it (*Fat.* 41–42.1, see 6.3.2). It is remarked on directly once in *Fat.* 40, twice in *Fat.* 41, and once in *Fat.* 43, where Chrysippus, after having presented the cylinder analogy, makes the connection back to the underlying issue, fate.<sup>137</sup> In Cicero's presentation of the analogy (*Fat.* 42–43.1) fate is not mentioned. The analogy is concerned with the workings of the antecedent causes, not with their relation to fate. The issue is not whether assent is fated—this is presupposed—but whether assent is externally forced.

In *Fat.* 40 and 41 the relation between fate and antecedent causes is expressed as 'If everything happens by fate, everything happens by an antecedent cause' (40) and 'if everything happens by fate, it follows indeed that everything happens by antecedent causes' (41). In *Fat.* 43 we encounter the same idea, but presented in contraposition: 'For if one thing were brought about without an antecedent cause, it would be false that everything happens by fate'. I take it that all three formulations are equivalent.

<sup>137</sup> 'If then anything were brought about without antecedent cause, it would be false that everything happens by fate; if, however, it is plausible that everything that happens has a cause preceding it, what can one put forward for not conceding that everything happens by fate? one only has to understand the distinction and difference amongst causes.' (*Fat.* 43.2)

(Quod si aliqua res efficeretur sine causa antecedente, falsum esset omnia fato fieri; sin omnibus, quaecumque fiunt, veri simile est causam antecedere, quid adferri poterit, cur non omnia fato fieri fatendum sit? modo intellegatur, quae sit causarum distinctio ac dissimilitudo.)

This passage forms the last part of Cicero's direct report from Chrysippus (cf. 'Haec cum ita sint a Chrysippo explicata', *Fat.* 44). Yet, it seems strangely disconnected with the previous section. Why should Chrysippus make these points immediately after the cylinder analogy? The paragraph makes most sense if read as a final summary concerning Chrysippus' whole argument in *Fat.* 41–3, of which Cicero presents a version shortened almost beyond recognizability: the opponent(s) had attacked the Fate Principle (*Fat.* 40) and its validity has hence ultimately to be defended. The best I can come up with is the following attempt at restoring the argumentation:

'You (i.e. the opponents) have argued: "the Stoics claim that if everything is fated, everything has an antecedent cause; but if everything has an antecedent cause, it is necessitated and does not depend on us; but not everything is necessitated, hence not everything has an antecedent cause, hence not everything is fated." But I (Chrysippus) stick to my claim that everything has antecedent causes. For if not, the Fate Principle would be false (*quod . . . fato fieri*). And I have just shown that not all antecedent causes necessitate their effect. The reason for this is that not all antecedent causes are perfect causes (*modo intellegatur . . . dissimilitudo*). Hence, you can admit that everything has antecedent causes (*omnibus . . . antecedere*) and hence you don't have reason any longer to deny that everything is fated (*quid adferri . . . fatendum sit*)'.

(The tentative formulation (*veri simile* and *quid adferri poterit*) would rather fit Cicero's (sources') harmonizing efforts than Chrysippus (cf. 6.4.1). For Chrysippus the causation principle is not a matter of plausibility.)

It is the fourth passage which is most often adduced as evidence for the Identity View. In it we find the phrase 'when we say that everything happens by fate by way of antecedent causes' ('cum dicimus omnia fato fieri causis antecedentibus') (*Fat.* 41). Here the expression 'by way of antecedent causes' has been understood as explaining and defining the expression 'by fate'. For a full understanding of what Chrysippus intended we would need the original Greek wording, which cannot be recovered. Nor can we be sure that Cicero is translating literally.<sup>138</sup> But what matters is that neither the Latin nor the likely alternatives for the Greek original entail identity of 'fate' and 'antecedent causes'. As far as the phrase is concerned, fate manifests itself—*either wholly or partly*—in the antecedent causes of events. If we remember that the only other information in our passage about the relation between fate and antecedent causes are *three* variations on the conditional 'if everything happens by fate, every thing happens by an antecedent cause',<sup>139</sup> it seems most likely that the phrase at issue is just an abbreviated version of that conditional—and that if there was an exact Greek parallel, it was such an abbreviation. What the passage *Fat.* 40–3 tells us about the relation between fate and antecedent causes is nothing more than that it is a necessary condition for the Fate Principle that every event has an antecedent cause.

There is one other Chrysippean passage on this point in Cic. *Fat.* 20–1, which needs to be thrown into the balance. It runs 'if this is so, then everything that happens, happens by way of preceding causes; and if this is so, everything happens by fate' (cf. 2.1.1 for the context). This quote implies the converse of the conditional from *Fat.* 40–1 and 43, i.e. 'if everything happens by way of an antecedent cause, then everything happens by fate'. Taken together the Cicero passages suggest the relation between fate and antecedent causes as: 'everything happens by an antecedent cause precisely if everything happens by fate'—and I take it Chrysippus would also have agreed to 'something happens by an antecedent cause precisely if that thing happens by fate.'

But this equivalence does not imply the Identity View. For it is not the same as the identity of the antecedent causes with fate. Rather, it fits in just as well with the Non-identity View. This can be seen as follows: Assume

<sup>138</sup> The Greek could have been an *acc. c. inf.*, containing a *dativus causae* or *instrumenti* (προηγούμεναις αἰτίαις), which could be translated as 'everything happens in accordance with fate owing to / by means of antecedent causes'. Alternatively a genitive absolute with a form of γίνεσθαι would be possible ('happening by antecedent causes') or something like καθ' εἰμαρμένην διὰ προηγούμενας αἰτίας or κατὰ προηγούμενην αἰτίαν.

<sup>139</sup> Cf. also the equally careful formulation in *Fat.* 44, 'nor will he (i.e. Chrysippus) concede that, if everything happens through fate, everything must happen by antecedent and necessitating causes' ('neque . . . concedet, ut, si omnia fato fiant, omnia causis fiant antecedentibus et necessariis').

- (i) that an event is fated if and only if it has an antecedent cause;
- (ii) that fate is the entirety of all causes (the Non-identity View);
- (iii) that there are certain events, such as assents, that by their very nature require an internal cause.

From the fact that an assent is fated, we can infer both that it has an antecedent cause (by (i)), and that it occurs (by the principle of the unalterability of fate). From the fact that it occurs we can infer that it has an internal cause (by (iii)). From the fact that it has an internal cause, we can infer that fate is also the internal cause of it (by (ii)). There is nothing whatsoever inconsistent in this. The repeated emphasis in Cicero's *On Fate* on the relation between fate and *antecedent* causes can be explained by the fact that the opponents wanted Chrysippus to give up the claim that everything has external antecedent causes (6.2), whereas they seem not to have objected to the presence of internal non-antecedent causes. (Carneades, for instance, has no problem with non-antecedent internal causes, as e.g. our nature, cf. Cicero *Fat.* 23–5, but with external antecedent causes only.) The adherents of the Identity View on the other hand face the following problem: if Chrysippus identified fate and antecedent causes, why do we have no evidence that states this directly, but instead *five* (six, with *Fat.* 44) sentences in Cicero which express a more complicated relationship?

The Gellius passage *NA* 7.2, I believe, suggests the Non-identity View rather than the Identity View. (But as I said earlier, in 6.1.1.2, word-for-word analysis of the text seems inappropriate, since Gellius may be paraphrasing loosely.) Gellius does not say anything explicitly about the relation between antecedent causes and fate. In *NA* 7.2.7–10 fate is introduced as working in two ways: on the one hand, internally, through the agent's mental dispositions, (i.e. for the contribution of the internal causal factor), on the other, externally prompting the person to act (6.3.1). I understand *NA* 7.2.7 ('ingenia tamen ipsa mentium nostrarum proinde sunt fato obnoxia, ut proprietates eorum est ipsa et qualitas') and *NA* 7.2.10 ('Est enim genere ipso quasi fatale et consequens, ut mala ingenia peccatis et erroribus non vacent') in such a way that fate is the *pneuma* in people's minds and makes up or sustains their mental dispositions which in turn are causally (co-)responsible for the moral quality of the actions; for details and translations see above, 6.3.1.

In the analogy, *NA* 7.2.11, fate is mentioned only as that which externally prompts the motion (6.3.3). But this does not entail that the analogy is inconsistent with the preceding passage, *NA* 7.2.7–10. In Gellius, just as in Cicero, the analogy is introduced in order to illustrate one particular point. This point seems to have been that the object's activity is due to its form or disposition and not to the external trigger of the movement. The crucial point in Chrysippus' refutation is that, fated or not, it is the

person's mental disposition that has to account for the response to the external stimulus. Hence no mention of fate is required—remember that it was not mentioned at all in Cicero's report of the analogy in *Fat.* 42.2–43. Fate, in Gellius, thus comprises internal and external causal factors, and this does not harmonize well with the Identity View.<sup>140</sup>

There is thus no clear evidence that Chrysippus held the Identity View. In addition, there are the following difficulties with this kind of interpretation:<sup>141</sup>

(i) The Identity View tallies neither with our general knowledge about Chrysippus' conception of fate, nor with his basic cosmology. For, unlike Posidonius, and like Zeno, Chrysippus held that fate is identical with the active principle (*qua* cause), which is also the same as Zeus, God, and Providence. This active power is fully causally responsible both for all change and for all sustenance of qualitative states in the world (cf. 1.1.1; 1.4.1).

However, the Identity View implies that there is something (the individual nature of human minds) which is causally responsible for assent, but which is *not* fate. It is thus forced to postulate a fundamental change in Chrysippus' physics (see above). It must assume that Chrysippus gave up the identification of fate with the active principle (*qua* cause) and that fate became one causal factor among others (as Posidonius seems to have held). This means that Chrysippus must also have given up those of his accounts of fate which imply the identification of fate with the active principle, such as 'fate administers the cosmos', etc. (cf. 1.4.1, 1.4.2). And indeed, it has been suggested by adherents of the Identity View, with reference to Cicero *Fat.* 40–3, that Chrysippus *did* change his position on fate. Now it is true that according to Cicero Chrysippus adduced the distinction of causes in order to defend his theory of fate. But there are various ways in which Chrysippus could have made use of his distinction:

- He could have *modified* his concept of fate. This would mean that some of his statements concerning fate would no longer hold.
- He could have *explicated* his fate doctrine by making explicit some of its elements which it implicitly already contained.
- He could have *developed* his theory by adding new elements, without giving up anything he held explicitly before; that is, instead of the added new elements, different ones contradictory to them could have been consistently added.

<sup>140</sup> The suggestion has been made that Chrysippus' reply in Cicero is later, and differs from Gellius, i.e. the Identity View has been restricted to Cicero (e.g. Gould 1970, 148–52). But the main argumentative points in Gellius are clearly the same as in Cicero (see 6.3.1 and 6.3.2), and a change to a theory like the Identity View would be superfluous.

<sup>141</sup> For the irrelevance of Plut. *Stoic. rep.* 1056—which has occasionally been adduced in this context—see below 6.4.2. For the related passages Cic. *Fat.* 44 and *Top.* 59 cf. 6.4.1.

We have no evidence that Chrysippus substantially *modified* his theory of fate, and certainly not in a way that would undermine the very foundation of his (meta)physics. One would expect such a drastic change to be chronicled by later sources; but the Zenonian and Chrysippean dualism with 'god equals fate equals the only active force, i.e. *pneuma*' is reported as if it was never challenged. Posidonius' and Cleanthes' views are presented as exceptions to this view.

To get around the incompatibility of the Identity View with Chrysippus' theory of fate as otherwise reported, it has been assumed that for Chrysippus *all* causes are antecedent causes,<sup>142</sup> and/or that *praepositus* and *antepositus*—or rather their Greek original—do not refer to the fact that the cause precedes (and prompts) the individual effect at issue, but to the fact that all causes have been laid down beforehand, from eternity,<sup>143</sup> internal causes would thus be included. But such interpretations run into related difficulties: the suggestion that all causes are antecedent causes cannot account for the fact that Chrysippus postulates the existence of causes that do not precede their effect, and are not causes of change, namely the cohesive (*συνεκτικός*) causes. The suggestion that in *Fat.* 41–2 *praepositus* and *antepositus* have the sense of 'laid down beforehand' encounters the problem that the Cicero text implies that for the Stoics there are causes that are not *antepositae*: *antepositae* causes are not primary and principal, Chrysippus says in *Fat.* 41–2, but he thinks that there *are* causal factors that are not *antepositus*, namely internal ones. If *antepositus*, *praepositus*, etc. meant 'laid down beforehand' in Cic. *Fat.* 40–3, this would imply that there are causes that have not been laid down beforehand—which would be incompatible with Chrysippus' fate theory, and again require that Chrysippus changed his position.

(ii) Still, even if we allow for the possibility that Chrysippus did change his theory, I cannot see how the change which the determinist Identity View suggests would help to justify moral responsibility. But it was the purpose of the distinction of causes to demonstrate how moral responsibility could be preserved within Chrysippus' theory. The opponents' objection was that our assents are externally forced, hence necessitated and not *ours* (6.2). The success of Chrysippus' reply to this objection is quite independent of whether we (or the natures of our minds) are or are not part of fate. What matters is (a) that it is *we* who are the main cause of assent and not something else, and (b) that the effect comes about without physical force or compulsion. And both these points are retained *equally well* if one assumes that Chrysippus held that the nature of our minds, *qua* causally active *pneuma*, make up part of fate, as the Non-identity

<sup>142</sup> So suggested by Ioppolo 1994, 4527–9.

<sup>143</sup> So, it seems, implied by Sharples 1991, 189.

View does. Chrysippus hence had no need to restrict fate to the totality of antecedent causes.

(iii) Later Stoic interpretations and developments of the Stoic doctrine of fate (apart from Cic. *Fat.* 44 and *Top.* 59, for which see below, 6.4.1) show no awareness or traces of anything like the Identity View, and some positively confirm a theory along the lines of the Non-identity View. If the Identity View had been Chrysippus' position, one would expect it not to have gone unnoticed as it involves such a fundamental change of Stoic physics.

There is no mention of the Identity View in Diogenianus' criticism of Chrysippus in Eusebius' *Preparation for the Gospel*. Neither Seneca, nor Epictetus, nor Marcus Aurelius, shows any traces of it (or its reverberations for Stoic physics) in his treatments of the subject. The Middle Platonist texts, which criticize the Stoics and themselves maintain a modification of Stoic fate theory, show no knowledge of such a Stoic theory either; rather they devise a theory *in contrast to* the Stoic one, that looks like some version of the Identity View (e.g. [Plut.] *Fat.* 570c–e). The later orthodox Stoic development reported in Alexander and Nemesius refers to Chrysippus as its rightful ancestor (for details see 8.1). But rather than identifying fate with the antecedent causes, it takes the nature of the objects at which the effect takes place *explicitly* as a fate-factor, and even as necessitating (8.2 and 8.3). This is an emphasis exactly opposite to the Identity View. (There are no other significant differences from Chrysippus in this theory, only developments, reflecting the change of emphasis of problems of its time.)

A later text, which may well report early Stoic theory and may, at first sight, seem to support the Identity View is [Plut.] *Fat.* 574e. This passage adduces as the first in a list of points in favour of the Fate Principle the thesis 'that nothing happens uncaused, but <everything happens> in accordance with preceding causes'.<sup>144</sup> In this passage nothing is said or implied about the relation between fate and antecedent causes, except that the quoted statement backs up the Fate Principle. This suggests that the statement is a necessary condition of the Fate Principle, just as is implied in Cicero. Moreover, and significantly, the next point added in the list in support of the Fate Principle is 'that the universe is administered by nature, and is animated by one pneuma, and in "sympathy" with itself'<sup>145</sup> (ibid). This is a clear allusion to fate *qua* nature of the universe, identical with the active principle which penetrates everything and which has the function of holding the universe together. It suggests that fate is responsible both for sustaining qualitative states and for changes.

<sup>144</sup> Τὸ μὴδὲν ἀναίτιως γίνεσθαι ἀλλ' κατὰ προηγουμένης αἰτίας.

<sup>145</sup> Φύσει διοικεῖσθαι τόνδε τὸν κόσμον, σύμπουν καὶ συμπαθὴ αὐτὸν αὐτῷ ὄντα.

Thus the passage [Plut.] *Fat.* 574d–e as a whole rather speaks against the Identity View.

### 6.3.7.2 *Fate and necessity*

The Identity View is thus not backed up by any of the texts mentioned. If we turn to the Non-identity View, a central question is this: How can Chrysippus successfully defend moral responsibility, contingency, and that which depends on us, if he holds that the nature of our mind is part of fate, and fate works thus through us? Part of the answer has already been given in 6.3.5 and 6.3.6. For a full understanding of the point of Chrysippus' argument in Cic. *Fat.* 41–3 and Gell. *NA* 7.2.7–14, a further factor needs to be introduced, viz. the relation between fate and necessity. Once this relation is sorted out, it becomes clear that, in his reply, Chrysippus gave an explication of his conception of fate rather than simply re-labelling determining factors in causal processes or making major changes to his theory—and that he had no reason to give up his view that fate encompasses non-antecedent internal causes as well.

It is plain from several passages that Chrysippus' solution in Cic. *Fat.* 41–3 is grounded on considerations about the relation between fate and necessity. First, in *Fat.* 42.1<sup>146</sup> Chrysippus distinguishes two philosophical positions with respect to the ways in which necessity relates to fate. There is the view of the fate-determinists 'who introduce fate in such a way that they add necessity' to it, i.e. they assume that fate and necessity always go together and that every fated event is necessary. These (real or fictitious) necessitarians hold<sup>147</sup>

- that 'everything is fated' means the same as (or implies) 'everything is necessary'
- that everything that happens is both necessary and fated
- that everything that happens has at least one antecedent cause
- that the antecedent causes are sufficient causes of their effects, and thus make their effects necessary.

The second view is that held by Chrysippus himself. *Fat.* 42.1 implies that for Chrysippus the antecedent causes are not perfect and principal and thus do not make their effects necessary. As Chrysippus' view differs from that of the necessitarians, we can infer that since Chrysippus thinks that—at least in the cases under discussion—antecedent causes do not make their effects necessary, he holds that fate and necessity are no longer necessarily connected with each other. In accordance with this, *Fat.* 41.1 tells us that Chrysippus rejects the thesis that fate entails necessity and holds that not everything is necessary but everything is fated.

<sup>146</sup> The text is quoted at the end of 6.3.2.

<sup>147</sup> Their view resembles that of the fate-determinists of Cic. *Fat.* 39, see 6.4.1.

(This point is confirmed by *Fat.* 39,<sup>148</sup> where we learn that Chrysippus wanted to liberate the motions of the soul from *necessity*—not from fate.) Thus Chrysippus

- holds that every event has an antecedent cause, but denies that the antecedent causes make their effects necessary (at least in the cases at issue)
- holds that because of this not every event is necessary
- but sticks to the view that every event—and every state—is fated, inasmuch as they are *fully* determined by a combination of causal factors.

In the case of assent, which is the key issue in this context, this works as follows:

- The impression is the externally induced *antecedent cause* of the effect, i.e. the act of assent.
- The nature of the person's mind forms the *internal* and 'main' causal factor.
- The assent is *fated* because it is fully determined by the combination of external and internal factors—which together make up the relevant part of fate because of which it is fated.
- The effect is *not necessary*, because the external antecedent cause does not force the effect to come about (see below).
- Finally, the effect *depends on the agent*, because that which determines the quality of the effect is the nature of the agent's mind—which involves reason and has a moral dimension to it, and which is unforced, since it works via the faculty of assent.

Here a question arises concerning the justification of non-necessity: is it not evidently absurd to call something (i.e. assents) not necessary if the antecedent causes do not determine it, but *something else* does? Is Chrysippus not either just playing with words by calling something non-necessary which everyone else would call necessary? or does he simply affirm an obvious falsity?

However, this sort of objection can be invalidated if one remembers that Chrysippus had presented his own analysis of the modalities and that it is natural to assume that he is relying on this analysis when he talks about necessity in his reply. In 3.1 we have seen that the Hellenistic discussion of the notions of possibility and necessity was closely linked to the problem of determinism and free action; furthermore, that Chrysippus maintained that a correct analysis of the modal concepts—unlike Diodorus' 'faulty' analysis—escapes the necessitarian consequences which Diodorus' modal notions implied. This 'correct' analysis bears out the commonly accepted factors of external, physical, hindrances and force as co-criteria

<sup>148</sup> The text is quoted in 6.4.1.



for necessity and impossibility. As we have seen, this element from physics makes up part of Chrysippus' modal notions (3.1.5). We should thus expect that when we learn that Chrysippus wanted to 'escape necessity' (*Fat.* 41–2) the point he wanted to make about fate and necessity must at the very least square with his, i.e. the correct, conception of necessity—if not be based on it. (Especially so, as his concept captures the common view on necessitation as something that involves force.) The reason why for Chrysippus assents are not necessary is thus not that they are not fully determined by fate (for they are), but that they are not *forced*—neither by external antecedent causes, nor by anything else. This is corroborated by the fact that in Gellius, both in the opponents' argument, and in Chrysippus' reply, force or compulsion played an important role (6.2.1, 6.3.1).

If we look at Chrysippus' modal accounts, the definiens of necessity is a disjunction, consisting of two parts (for details see 3.1.4): either the proposition is not capable of being false or the proposition is capable of being false but external hindrances prevent it from being false. Only the second part applies to the present issue. ('The opponents' point is clearly not that all fated things are necessary in the sense that they, as far as the individual nature of the objects involved is concerned, cannot not happen.)

If one invokes the second part of the definition of necessity together with Chrysippus' concept of non-necessity in connection with the Cicero passage, one obtains the following result: If an act of assent were necessary, this would mean that the proposition 'I assent to this impression' could in principle be false, but is prevented from being false by *external* circumstances. It could in principle be false, since I could withhold assent in the sense that having a faculty of assent means being in principle able to give or withhold assent. The proposition is prevented from being false, because external circumstances, i.e. primarily the externally induced impressions, prevent me from not assenting (force me to assent). This would be the necessitarians' view. By contrast, if an act of assent were non-necessary, that would mean that the proposition 'I assent to this impression' could in principle be false and is not externally prevented from being false. It would not be prevented from being false, because although the impression entered my mind, there would be no external force or hindrance that prevents the act of assent from not happening.<sup>149</sup> This would be Chrysippus' view.

Hence—in accord with his analysis of the modalities—for Chrysippus, on the necessitarians' view, assent comes out as necessary; and on his own

<sup>149</sup> If there is anything that 'hinders' the withholding of assent it is me or the nature of my mind—but Chrysippus would probably and rightly object to this use of words, since this 'hindrance' would be neither external nor connected with force (cf. 3.3 on this point).

view, assent comes out as non-necessary. And that is precisely the point he purports to make in Cic. *Fat.* 41–3. There is no external force that determines whether assent is given or withheld. The quality of the response depends on the nature of the agent's mind.<sup>150</sup>

The version of the Non-identity View presented here thus fits in with all our sources on Chrysippus' doctrine of fate, as well as with Chrysippus' modal theory. It is based on Chrysippus' distinction between inevitable causal determination (fate) and external causal force (physical force exerted by antecedent causes, which makes things necessary), which we know later Stoics made in a comparable context (Ch. 8). It also both renders Chrysippus' position on fate and that which depends on us consistent in itself and does not force us to postulate any change in early Stoic physics.

### 6.3.7.3 *Appendix: a Stoic distinction of causes in Augustine*

A passage in Augustine, *Civ.* V 10, confirms that the Stoics distinguished two types of causes in order to escape necessity:<sup>151</sup>

Hence, too, one need not fear that necessity which the Stoics feared when they endeavoured to distinguish between the causes of things in such a way that they exempted some from necessity, but subjected others to it; and they assigned our volitions to those which they did not want to be subordinated to necessity, evidently believing that the volitions would not be free if they were subjected to necessity.<sup>152</sup> (208.7–12 Dombart and Kalb)

The contrast between necessary and non-necessary things and the subordination of the volitions (*voluntates*) under the latter is parallel to Cic. *Fat.* 41–4—assuming that *voluntates* here stands for impulses or assents to impulsive impressions.

The natural reading of the passage is that the Stoics at issue distinguished 'between the causes of things in such a way that they exempted some *causes* from necessity, etc.'. If one adopts this reading, it follows that

<sup>150</sup> M. Frede (*ap.* Sorabji 1980, 274), who identifies fate with the antecedent causes, considers that for Chrysippus everything is necessary, but not everything is necessitated by the necessity of fate. This option may seem slightly at odds both with Chrysippus' concept of fate (*qua* being identical with the causally active pneuma in all its manifestations) and with his modal theory (in which Chrysippus insists on the existence of non-necessary things); cf. also 3.4.2 end.

<sup>151</sup> In *Civ.* V Augustine draws from Cicero *On Fate, On the Nature of the Gods, On Divination*, quotes from Seneca, and reports from Posidonius. Several times causal fate is contrasted with astrological fate, the prevalent idea of the time, to which Augustine is strictly opposed. The passage quoted could be a loose summary of Cic. *Fat.* 39–45 but could equally go back to Posidonius or some other source.

<sup>152</sup> Unde nec illa necessitas formidanda est, quam formidando Stoici laboraverunt causas rerum ita distinguere, ut quasdam subtraherent necessitati quasdam subderent, atque in his, quas esse sub necessitate noluerunt, posuerunt etiam nostras voluntates, ne videlicet non essent liberae, si subderentur necessitati.

the types of causes about which Augustine talks cannot be those two types of Chrysippus. Chrysippus distinguished between causes which necessitate (cf. my remarks on *causa necessaria* above) and those which do not necessitate. Augustine speaks about (Stoic?) causes that are necessitated (*necessitati subderent*) and causes that are not necessitated (*necessitati subtrahent*). (This is in line with the Ciceronian distinction of *causae fortuitae, naturales, voluntariae* he mentions in *Civ.* V 9 206.7–8). The causes Augustine talks about are thus in fact the ('materialized') effects Chrysippus talks about: human volitions (*voluntates*), which presumably are motions (*motus*, cf. *ibid.* 206.16–17), are presented as non-necessitated effects in Cicero. They are presented as *causes* of actions by Augustine (cf. *ibid.* 205.29–30, 'humanae voluntates humanorum operum causae sunt'; the context is Stoic). Perhaps Augustine, thinking of volitions primarily as causes (of action), mixed things up when taking information from his source.

If, on the other hand, one opted for the—grammatically problematic—reading that the Stoics at issue distinguished 'between the causes of things in such a way that they exempted some *things* from necessity, etc.',<sup>153</sup> Augustine's distinction of causes would turn out to be exactly parallel to Chrysippus', as reported by Cicero in *Fat.* 41–4. For in that case, some *things* would be necessitated (viz. by necessitating causes), and others would not be necessitated (viz. since they have causes that do not necessitate them). This reading may find some support in the fact that in the next sentence Augustine goes on to compare (or rather contrast) the necessity of death with the necessity of our volitions; for here death is certainly not a cause, but a 'thing', and accordingly, our volitions would be regarded not as causes, but as 'things', too.

In either reading, both context and passage suggest that there is no change in what the Stoics thought. 'x is fated' means (fate as *ordo*, etc. *causarum*); antecedent causes are not identified with fate, nor are any other causes. The emphasis is on the point that some (fated) things are necessary, others are not; i.e. that the scope of necessity is restricted—just as in the Cicero passage.

#### 6.4 A LATER INTERPRETATION OF CHRYSIPPUS' CONCEPT OF FATE?

There are a couple of passages that belong in the context of Chrysippus' arguments for the compatibility of fate and moral responsibility, but which neither directly report Chrysippus, nor summarize his theory. These are

<sup>153</sup> This means taking *rerum*, not *causas*, as antecedent of *quasdam*, etc.

Cic. *Fat.* 39–40.1, 44–5 and Plut. *Stoic. rep.* 1056a–d. Both passages have been adduced to argue that Chrysippus was or at some point became a libertarian, or that he identified fate with the totality of antecedent causes.

This section pursues a dual purpose: on the one hand, to continue and complete the argument from the previous section (6.3.7), by showing that the above-mentioned passages do not present Chrysippus' own view (or at least not accurately), and hence can not be used as evidence for his theory; on the other, to establish what the passages actually state, and to consider the possibility that we have a specific, tendentious, interpretation of Chrysippus' theory by a later philosopher, perhaps even a Stoic, who himself approves of the view expounded in this interpretation. Both issues require us to determine the status and argumentative function of the passages in their context. For some misinterpretation seems due to insufficient differentiation between the report and quotations from Chrysippus' theory on the one hand (Cic. *Fat.* 40.2–43) and on the other the later interpretation of this theory, which frames this passage (39–40.1 and 44–5) and to which I henceforth refer as the 'framework story'. Similarly, in Plutarch, a tendentious interpretation of Chrysippus' view has been wrongly taken to be Chrysippus' own position.

#### 6.4.1 *The 'framework story' in Cicero's On Fate*

The framework story (Cic. *Fat.* 39–40.1 and 44–5) has gained most attention in the context of the question of Cicero's sources for his *On Fate*. Both what texts he drew from, and how much of the work is Cicero's own contribution are matters of ongoing controversy. However, this debate is marginal to the present topic, and will be considered only insofar as it is germane to our understanding of the Stoic theory of fate.

The framework story does not quote from Chrysippus nor do we obtain any information about his position in addition to what we learn from *Fat.* 40–3. I believe that it contains elements both from Cicero and from a philosopher later than Chrysippus who was familiar with Chrysippus' work on fate as presented in *Fat.* 41–3: Cicero is responsible for the overall 'scenario' at *Fat.* 39–40.1 and *Fat.* 45; *Fat.* 44 is based on the later philosopher's work, whose view is also alluded to in *Fat.* 39. This becomes clear from the fact that in the framework story two different lines are followed up. First we have the idea that Chrysippus wanted to be the arbiter between two rival theories on fate (one necessitarian, the other libertarian). This first story peters out at *Fat.* 40. It is, I suppose, by and large Cicero's. Second, we have the theory that Chrysippus and some unnamed libertarians hold *de facto* the same philosophical view. I take this to be the story of the post-Chrysippean philosopher from whom Cicero

draws.<sup>154</sup> Neither author has scruples about the objectivity of what they claim. Cicero fabricates his tale, presumably with some doxographical back-up, without caring much about historicity.

The method and overall intention of the author of *Fat.* 44 are the opposite of what we know from Plutarch, Sextus, etc., in places where they report and criticize Stoic doctrine. The latter attempt to expose as many inconsistencies as possible, within Stoic doctrine or between Stoic doctrine and common-sense views. In the present case, however, the author has a propensity that proves similarly destructive to objective representation: he is what one may call a 'harmonizer' or 'syncretic'.<sup>155</sup> Instead of disclosing or constructing inconsistencies, syncretics attempt to show—often against all appearances—that two philosophical theories are in substance the very same, just expressed in different ways. 'Harmonizing' is a common (counter-)intellectual activity in later antiquity. The ends those efforts serve vary, and so do their plausibility and truthfulness to their sources.<sup>156</sup>

To see in what way Cicero and the author behind *Fat.* 44 follow up their respective purposes, one needs to look at the relevant passages.

(1) And, in any event, my own view is this: There were two positions held among the old philosophers. (2) One was held by those who maintained that everything happens through fate in the sense that this fate brings with it the force of necessity. This position was held by Democritus, Heraclitus, Empedocles, and Aristotle, (3) the other by those who believed that there are voluntary motions of the mind without any <force of> fate. (4) Between these two positions Chrysippus, like an honorary arbiter, seems to have wanted to find a middle way; (5) but as a matter of fact he rather sides with those who want the motions of the mind to be freed from necessity. (6) But while making use of his own terminology, he gets into difficulties such that, against his will, he confirms the necessity of fate.<sup>157</sup> (*Fat.* 39)

The passage does not claim to present more than Cicero's view on Chrysippus' fate theory: 'my own view is this' (1) suggests that Cicero is speaking *in propria persona*. Three points are made about Chrysippus, each of which reveals the tendentiousness of the report:

<sup>154</sup> These assumptions gain further confirmation in what follows.

<sup>155</sup> Yon (1950, 20 n. 4) calls people like this 'conciliateurs', 'C'est la méthode ordinaire des conciliateurs' . . . Well-known examples are Philo of Larissa, Antiochus, Posidonius.

<sup>156</sup> One should not confound this attitude with 'eclecticism', which is a pick-and-choose method that combines parts of different theories without any claim that the ancestor theories are the same. Both attitudes, however, are often displayed by the same writer.

<sup>157</sup> (1) *Ac mihi quidem videtur, cum duae sententiae fuissent veterum philosophorum, (2) una eorum, qui censerent omnia ita fato fieri, ut id fatum vim necessitatis adferret, in qua sententia Democritus, Heraclitus, Empedocles, Aristoteles fuit, (3) altera eorum, quibus viderentur sine ullo fato esse animorum motus voluntarii, (4) Chrysippus tamquam arbiter honorarius medium ferire voluisse, (5) sed adplicat se ad eos potius, qui necessitate motus animorum liberatos volunt; (6) dum autem verbis utitur suis, delabitur in eas difficultates, ut necessitatem fati confirmet invit.*

First, in (4), we are told that Chrysippus seems to have wanted to find an intermediate (and mediating) position between necessitarians and libertarians. But surely Chrysippus did not develop his fate theory *with the goal* of finding such an intermediate position. Rather, Chrysippus wanted to uphold both the Fate Principle and the thesis that some things depend on us. This does not preclude Chrysippus' position being *interpreted* as intermediate between necessitarians and libertarians. (For example, one could plausibly argue that his position is intermediate insofar as (i) by holding the Fate Principle it is more deterministic than the libertarians' and (ii) by not holding that everything is necessary, it is less deterministic than the necessitarians'.)<sup>158</sup>

Second, in (5), we learn that Chrysippus is rather on the side of the libertarians. This becomes plausible, *if* one takes the main contentious point to be the question whether the motions of the soul are externally necessitated, since Chrysippus indeed denies universal external necessity. But this is entirely a matter of weighting.

Third, in (6), we are told that Chrysippus, by using his own terminology, unwillingly or unintentionally confirms the necessitarians' view. This sounds a little suspicious: because he uses his own words Chrysippus confirms the necessity of fate, although he does not want to. The report from Chrysippus in *Fat.* 41–3, which is meant to illustrate this claim with the example of assent (cf. *Fat.* 40), does not illustrate it at all.<sup>159</sup> Instead, whichever way one interprets *Fat.* 41–3, it unambiguously represents Chrysippus' doctrine as different from the necessitarian position and Chrysippus as making exactly that point. (The reason for this incongruity seems to be that *Fat.* 41–3 was adduced by the author of *Fat.* 44, who has a slightly different story to tell than Cicero; the parts of Chrysippus' doctrine that are presented rather help to illustrate the point from (5), that Chrysippus is closer to the libertarians.)

The story is spun on in *Fat.* 40:

And let us, if you like, see how this works in the case of assent, which I discussed at the beginning of my speech. For those old philosophers who held that everything happens through fate said that these assents were brought about by force and necessity. But those who disagreed with them freed assents from

<sup>158</sup> We find this way of understanding Chrysippus' position also in Oenomaus: *Χρυσίππος . . . ὁ τὴν ἡμιδουλείαν εἰσάγων* (Eus. *Praep. ev.* 6.7.14, cf. 6.7.2). But note that von Arnim's presentation of the Oenomaus text (*SVF* ii. 978) as Chrysippean is misleading: the only thing we learn about *Chrysippus'* theory of fate is that he introduced 'semi-slavery'. There is no indication that Oenomaus drew from a Chrysippean text, and the central passage that von Arnim quotes (6.7.23–4), which concerns the example of Laius, does not mention Chrysippus at all and stems almost certainly from a later Stoic text.

<sup>159</sup> 'This' (*hoc*, *Fat.* 40, text quoted in next note) might refer to all three points together. Still, it does not illustrate the third.

fate and maintained that if fate is applied to assents, it is not possible to keep necessity away from them. Their argument was as follows:<sup>160</sup>

Here we can observe a further incongruity: In this passage the alleged counter-argument of the libertarians (*Fat.* 40.2, see 6.2.2) is introduced as directed against 'those old philosophers'. These can only be the group of philosophers adduced in *Fat.* 39, who did not include any Stoics; rather, Chrysippus' view was contrasted with theirs. However, as we have seen above in 6.2.2, the argument in *Fat.* 40.2 was—actually or fictitiously—directed against a Stoic, and most probably against the Chrysippean fate doctrine. (It is another anachronism that the topic of assent (*συγκατάθεσις*) was only introduced by the Stoics, and as far as we know was not discussed by any of 'those old philosophers'.)<sup>161</sup>

After the report from Chrysippus' text (*Fat.* 40.2–43, discussed above in 6.2.2 and 6.3), *Fat.* 44 takes up the story again, or rather, takes up the point from (5) in *Fat.* 39:

(1) As this is how these things are expounded by Chrysippus, (2) if those who deny that assents happen through fate none the less allow that they happen without a preceding impression, that is a different argument; (3) but if they admit that impressions precede, and none the less hold that assents do not happen through fate, since that proximate and cohesive cause does not bring about the assent, see whether they do not say the same thing. (4) For while Chrysippus concedes that the proximate and cohesive cause of the assent is placed in the impression, he neither concedes that this cause is necessitating for the assenting, nor will he concede that, if everything happens through fate, everything must happen by antecedent and necessitating causes. (5) And likewise those who disagree with him, when admitting that assents do not happen without preceding impressions, will say that if everything happens through fate in such a way that nothing happens without a cause preceding it, then one has to admit that everything happens through fate. (6) It is easy to see from this, since both sides, once their position has been made accessible and explained, come to the same result, that they are in disagreement only in words, but not in fact.<sup>162</sup> (*Fat.* 44)

<sup>160</sup> Atque hoc, si placet, quale sit, videamus in adsessionibus, quas prima oratione tractavi. Eas enim veteres illi, quibus omnia fato fieri videbantur, vi effici et necessitate dicebant. Qui autem ab iis dissentiebant, fato adsessiones liberabant negabantque fato adsessionibus adhibito necessitatem ab his posse removeri; iique ita disserebant.

<sup>161</sup> Cf. Duhot 1989, 203–6, for further anachronisms.

<sup>162</sup> (1) Haec cum ita sint a Chrysippo explicata, (2) si illi, qui negant adsessiones fato fieri, fateantur tamen eas\* sine viso antecedente fieri, alia ratio est; (3) sed si concedunt anteire visa, nec tamen fato fieri adsessiones quod proxima illa et continens causa non moveat adsessionem, vide, ne idem dicant. (4) Neque enim Chrysippus, concedens adsessionis proximam et continentem causam esse in viso positam neque eam causam esse ad adsentendum necessariam, concedet ut, si omnia fato fiant, omnia causis fiant antecedentibus et necessariis; (5) itemque illi, qui ab hoc dissentiunt, confitentes non fieri adsessiones sine praecursione visorum dicent, si omnia fato fierent eiusmodi, ut nihil fieret nisi praegressione causae, confitendum esse fato fieri omnia; (6) Ex quo facile intellectu est, quoniam utrique patefacta atque explicata sententia sua ad eundem exitum veniant, verbis eos, non re dissidere.

This section contains the crucial information about how the later author understands Chrysippus. In (2) and (3) two libertarian positions are distinguished. Both are libertarian in the sense that they deny the Fate Principle

(i) Everything happens by fate.

They differ in their attitude to the thesis

(ii) Everything happens by antecedent causes.

The first kind of libertarians reject this statement (ii); they play no further role in *Fat.* 44. The second kind of libertarians accept (ii); I call them causal libertarians.

The aim of the author of *Fat.* 44 is to show that Chrysippus and the causal libertarians hold in fact the same philosophical position and that they differ only in terminology, viz. regarding the meaning of the term 'fate' (cf. (3), (6); the point had been announced in *Fat.* 39.) For this purpose he restates the main elements of Chrysippus' argumentation from *Fat.* 41–2 in his own terminology, but otherwise exactly like Chrysippus (cf. (4)).<sup>163</sup> His argument turns on the point of the relations between necessity, fate, and antecedent causes. First he seems to assume that the statement

\* I follow Valla (1485), etc. in deleting *non* after *fateantur tamen eas* (cf. Gercke 1885, 703). All attempts to keep the negation and still make sense of the passage (Bayer 1959, 161–2, Kleywegt 1973, Schröder 1990, 142 n. 15 (*ap.* Sharples 1991, 192)) end up in subtleties of a kind which would be quite unigue—and implausible—in a Ciceronian philosophical text.

<sup>163</sup> Instead of the pairs of terms *proxima* and *adiuvans*, *perfecta* and *principalis* from *Fat.* 41–2, for the two types of causes, we have throughout *continens et proxima* and *necessaria*. The technical terminology for causes in *Fat.* 44 differs thus from that used in *Fat.* 41–2. This suggests that *Fat.* 44 is not taken from the report from Chrysippus—for why should Cicero in this place systematically use *technical* terms that differ from those he used when translating the report from Chrysippus? The terminology is restricted to *Fat.* 44 and differs from the passage on causation in Cic. *Top.* 58 ff. (see below); this may indicate that Cicero does not present his own observations here either.

The use of *continens* (i.e. cohesive) instead of *adiuvans* in *Fat.* 44 has been found puzzling. On the assumption that *continens* translates a Greek term such as *συνεκτικός*, with the meaning 'cohesive', it has been claimed that 'cohesive' is an inadequate name for auxiliary and proximate causes. For, the reasoning runs, it is only the *pneuma* in a thing which could rightfully be called 'cohesive' by the Stoics. But there is no real problem here. It is helpful to remember that the term originally described the function of a cause. For even in Stoic physics antecedent causes can meaningfully be called 'cohesive'. One only has to apply the familiar Stoic distinction between level of everyday experience, and the cosmic level. The antecedent causes of individual motions can be looked at in two ways: as auxiliary and proximate causes they contribute to the motions of individual objects; but if one considers their function in the universe as a whole, they serve to hold the universe *qua* universe together. This is, in fact, the reason why the Stoics do not permit events that have no antecedent causes. Hence Cicero's use of *continens*, meaning 'cohesive', for auxiliary and proximate causes, would be in no way inconsistent, and not even un-Stoic. For textual evidence and for an alternative explanation of the use of *continens* in *Fat.* 44 see Bobzien 1998b, section 5.



(iii) If everything happens by antecedent causes, everything is necessary

is rejected both by Chrysippus (4) and by the causal libertarians (implied by (3)). Second he interprets Chrysippus' thesis 'if everything happens by fate, everything happens by way of antecedent causes' as the identification of fate with the totality of antecedent causes. ('everything is fated' means 'nothing happens without antecedent cause', implied by (6).) On this reading of Chrysippus, the differences between him and the causal libertarians do indeed disappear. This can be shown as follows: Chrysippus and the causal libertarians are in agreement in that they both accept

(iv) Not everything that happens is necessary

and the above-mentioned

(ii) Everything happens by antecedent causes.

The two positions differ in that Chrysippus holds

(i) Everything happens by fate

but the causal libertarians deny this, presumably because they hold

(v) If everything is fated, everything is necessary

which we know Chrysippus in turn rejected. If one now substitutes 'everything happens by antecedent causes' for 'everything happens by fate', then (i) becomes the same as (ii), which was accepted by both parties; and (v) becomes the same as (iii), which was rejected by both parties. Hence the theories of Chrysippus and the causal libertarians, thus interpreted, appear *de facto* to be the same.

Yet it is unclear what exactly the common theory is which the author of *Fat.* 44 has in mind, since his exposition is incomplete in one essential respect. Common to both causal libertarians and Chrysippus are the acceptance of (ii), that everything happens by an antecedent cause, and of (iv), that not everything that happens is necessary. In particular they hold that the motions of the soul are not necessary but depend on us. The missing piece of information is what it is that is ultimately responsible for the resulting effect (assent) in the case of the motions of the soul. The main contenders that suggest themselves in the light of the previous sections of this chapter are: the person, meaning the nature of the person's mind, and including the person's character; that which formed the person's character (i.e. hereditary and/or environmental factors); or the person, independent of their character.<sup>164</sup>

<sup>164</sup> Cf. 6.3.5 for the concept of person, 6.3.6 for the question of the determination of character. Cicero discussed a number of possibilities earlier in *Fat.* 24 and 25: internal causes, fortuitous causes, no causes, etc.

Whether the theory the author intended is deterministic (in a modern sense), depends on which of the above alternatives he had in mind; and so does what the author thinks Chrysippus' fate theory is (which, of course, may differ from what Chrysippus actually held). There is little in *Fat.* 39 and *Fat.* 44–5 that helps to settle this issue. For instance the phrase *in nostra postestate* (*Fat.* 45) is notoriously ambiguous on this point (see 6.3.5). The only clear point is that there are no external, necessitating causes of the motions of the mind in question.

What shall we then make of *Fat.* 44? Overall it appears that the purpose of the passage is not so much a comparison of two doctrines in order to show that they are basically the same, but rather, an attempt to provide a *particular* interpretation of Chrysippus' fate theory, namely to show that Chrysippus is, at heart, a libertarian. (Libertarian in the above-given sense as someone who does not believe that everything is fated.) The only philosopher named in *Fat.* 44 (and *Fat.* 45) is Chrysippus. The libertarians remain anonymous; moreover, their view is not presented as a worked out, historical, theory of a particular philosopher or school—at least, the author seems unfamiliar with or not interested in such details.<sup>165</sup> The quote(s), etc. from Chrysippus (*Fat.* 40–3) seem to have been adduced by the author in order to illustrate and back up this interpretation.

*Fat.* 44 is the strongest piece of evidence that can be adduced by proponents of the view that Chrysippus identified fate and antecedent causes. But note the careful formulation even in this passage: the clause 'if everything happens by fate *in such a way* that nothing happens without a cause preceding it' (5) does not entail that Chrysippus identified antecedent causes with fate. The passage as a whole, it is true, implies that its author believes that Chrysippus made that equation; but it does not imply that Chrysippus himself made that equation.<sup>166</sup> The philosopher behind *Fat.* 44, it seems, did not deem Chrysippus' complex theory of compatibilism successful—perhaps he did not understand it. But he had no qualms about modifying it in such a way that it overturned Chrysippus' most basic (meta-)physical principles (see 6.3.6), or about selling him as a libertarian who is a little awkward when it comes to terminology.

<sup>165</sup> This can be seen from the beginning of *Fat.* 44, where the libertarians are introduced by 'those who deny that assents happen through fate . . .' (2), and where it is added that *if* they hold *x*, this; *if* they hold *y*, that; i.e. two variations regarding what they *might* say are presented. Thus it must be unknown to (or disregarded by) the author whether 'they' claimed *x* or *y*. Presumably 'those' stands just for whoever happens to hold such a libertarian view.

<sup>166</sup> Section *Fat.* 45 is (again) neutral to the tendentious interpretation of Chrysippus and the real Chrysippus. The missing end of the sentence should have run somewhat as follows: 'the others (or "Chrysippus") on the other hand, claim(s) that both happen through fate'. Similarly e.g. Yon 1950, p. xxxii. Lambius, who suggests <alteri, sive hae sive illae causae antecesserint, a rebus fatum abesse> (Bayer 1959 *app. crit.*), got it wrong.

Who was the author of *Fat.* 44? The answer can only be conjectural. The suggestions made have often been influenced by the assumption that Cicero mainly copied from a single philosophical work. I believe that there is no reason to assume that Cicero had just or mainly one source from which he drew. For (a) Cicero had any number of books available,<sup>167</sup> (b) he was intellectually able to organize and discuss philosophical material from various sources, and (c) structurally, Cicero's *On Fate* is rather a mess,<sup>168</sup> a fact which I for one find more easily explained by the assumption that Cicero composed the work by drawing from several sources, perhaps in some haste and without final editing, than by the assumption that one work of a philosopher of a specific philosophical school was Cicero's main or only source.

Serious contenders for the authorship of *Fat.* 44 are Carneades, Antiochus, and Posidonius (but this list is not exhaustive). Recently, Carneades has gained a lot of backing.<sup>169</sup> But the suggestions made are not immune to criticism.<sup>170</sup> As regards Antiochus and Posidonius, Cicero read both, and he appreciated both. From both he has drawn at various times in his philosophical works. Both are known for their harmonizing tendencies. We know little about Antiochus' view on fate. There is no evidence that he produced a work of that title. But Cicero, *Acad.* I 29, seems to give his view on this issue:

... and they say that this power is the soul of the world ... administering mainly the heavenly bodies and next those things on earth that concern human beings; they sometimes call this power 'Necessity', since nothing can <occur>

<sup>167</sup> He had his own library, and access to libraries of friends; cf. e.g. Barnes 1985, 232, on this point.

<sup>168</sup> Cf. also sections 2.1.2.1, 4.1.5, 5.2.3.2, and 5.3.1.

<sup>169</sup> By Donini 1989, 140–3, and Schröder 1990, 146–52; cf. also Sharples 1991, 20–3, 192–4.

<sup>170</sup> Here are some possible objections to the view that Carneades is the author of *Fat.* 44:

- Cicero's announcement in *Fat.* 39 that Chrysippus unwillingly supports fate's necessity can be seen as carried out in *Fat.* 44; there is thus no need to assume a further refutation of Chrysippus lost in the lacuna after *Fat.* 45; *Fat.* 39 suggests that Chrysippus confirms necessity by using his terminology. This is exactly the point picked up at *Fat.* 44. His use of language makes him look like a determinist, although in fact he is not one (see above).
- The causal libertarians seem approved of—what other purpose could there be for comparing Chrysippus with them? But their view conflicts with what Carneades puts forward in *Fat.* 23–5, (where he suggested that the motions of the soul have no external causes). As far as causal determinism is concerned, the causal libertarians would be just as much in trouble as Chrysippus.
- Conciliatory efforts are not Carneades' style. Donini's parallel passages are not cases of Carneades' *defending* a theory by likening it to another.
- Carneades is usually named in *On Fate* where Cicero draws from him.

otherwise than has been arranged by it, and sometimes a 'fated and unchangeable interconnection of eternal order'.<sup>171</sup>

This does not exactly sound like a libertarian position that exempts human assents from the power of fate.<sup>172</sup> Hence I sponsor Posidonius in this contest of speculation, mainly to keep him in the race. He held that everything is fated (DL 7.149), but, unlike Chrysippus, did not consider fate the one and only active power. He placed it third in the triad god, nature, fate (DD 324 (= P 103), Cic. *Div.* I 125). This could include the distinction between fate as external determining factor, made up from antecedent causes, and nature as internal factor. For Posidonius distinguished between *causa efficiens* and antecedent cause (Sen. *Ep.* 87.31–40 (= P 170)). Moreover, Posidonius wrote books on fate (DL 7.149), and Cicero resorted to his works for his own *On Fate* (Cic. *Fat.* 5–7, and perhaps also *Fat.* 34–6). This brings me to the passage in the *Topics*, where Cicero reports that fate is woven from non-necessitating causes:<sup>173</sup>

In this group of causes without which something is not brought about . . . some causes provide a preparation for bringing something about, and contribute things that are themselves helping, although they are not necessitating . . . From this kind of cause, one following on another from eternity, fate has been woven by the Stoics.<sup>174</sup> (*Top.* 59)

This passage can leave no doubt that someone (Cicero or a source) at some point thought that some Stoics identified fate with a subclass of all causes, namely with non-necessitating, and presumably antecedent, causes. The terminology of non-necessitating causes mirrors *Fat.* 44; the theory closely resembles *Fat.* 34–6 and Clement, *Strom.* 8.9 98.7 ff.<sup>175</sup> The conception of a chain of non-necessitating antecedent causes differs from Chrysippus'

<sup>171</sup> Quam vim animus esse dicunt mundi . . . procurantem caelestia maxime, deinde in terris ea quae pertineant ad homines; quam interdum eandem necessitatem appellant, quia nihil aliter possit atque ab ea constitutum sit, interdum\* quasi fatalem et immutabilem continuationem ordinis sempiterni.

\* The text is difficult. I have followed Plasberg, who marks a lacuna here and offers 'interdum' for 'inter'. But there are other possibilities, cf. e.g. Reid 1885, 135.

<sup>172</sup> *Acad.* II 38–9, which may also give Antiochus' view, and which claims that assent is a necessary condition for that which is in our power, is neutral with respect to the question of whether Antiochus' position was compatibilist or libertarian.

<sup>173</sup> Ioppolo 1994, 4530–1, argues that Cic. *Top.* 58–9 is not Chrysippean. I agree on this point, but believe that Cicero is putting together various theories, perhaps from memory, and thus we may well find bits from the theory behind *Fat.* 40–4 in the text, since Cicero wrote his *On Fate* only a month or so before he composed the *Topics*.

<sup>174</sup> Huius generis causarum, sine quo non efficitur . . . alia autem praecursionem quandam ad efficiendum et quaedam adferunt per se adiuvantia, etsi non necessaria . . . Ex hoc genere causarum ex aeternitate pendendum fatum a Stoicis nectitur.

<sup>175</sup> Cf. also Sharples 1995.

distinction of two causal factors involved in one instance of causation. It is then possible that *Top.* 59 is concerned with the same Stoic philosopher(s) responsible for the exegesis of Chrysippus in *Fat.* 44, i.e. perhaps Posidonius and those who shared his view.

#### 6.4.2 Plutarch's dilemma

Like the framework story in Cicero's *On Fate*, Plutarch's criticism of Chrysippus' fate theory in *Stoic. rep.* 1056a–1056d has been adduced to back up the interpretation of Cic. *Fat.* 40–43, that for Chrysippus fate is identical with the antecedent causes only. In this passage Plutarch develops a dilemma for Chrysippus, drawing on Chrysippus' own Sage Argument, which has been discussed above (6.3.4). The dilemma is grounded on the assumption that fate, being a cause (viz. the cause of all things) for Chrysippus, is either a self-sufficient or a procatactic (pre-initiatory) cause of human assenting. This distinction of self-sufficient and procatactic causes dominates the entire passage, and is in all likelihood the same distinction as that of perfect and principal causes and auxiliary and proximate causes in Cic. *Fat.* 40–2. (It would be surprising, if, in the same philosophical context, and for the same purpose, Chrysippus had made two very similar, but different, distinctions of causes.)<sup>176</sup> Procatactic causes are characterized as being weaker than self-sufficient ones, and as preventable (*Stoic. rep.* 1056c). Like auxiliary and proximate causes, they cannot self-sufficiently bring about their effect, and thus do not necessitate it. Plutarch's argumentation is somewhat convoluted, but the main structure of the passage can be sifted out:

- the first horn of Plutarch's dilemma, formally analogous to the Sage Argument: if fate is a self-sufficient cause, fate inflicts harm (*Stoic. rep.* 1056ab)
- the second horn of the dilemma: if fate is not a self-sufficient cause, fate is not omnipotent (*Stoic. rep.* 1056b–c)
- a modified restatement of the dilemma (*Stoic. rep.* 1056c–d).

Plutarch constructs the analogous argument, which makes up the first horn of the dilemma, basically by substituting 'fate' for 'the sage' in Chrysippus' Sage Argument ('Now, if one transfers this <proof> from the sage to fate . . . ' *Stoic. rep.* 1056a).<sup>177</sup> Plutarch provides only a short version of the analogous argument:

<sup>176</sup> For details see Bobzien 1998b, section 4.

<sup>177</sup> Ταῦτ' οὖν ἂν τις\* ἀπὸ τοῦ σοφοῦ μεταφέρων ἐπὶ τὴν εἰμαρμένην . . .

\* ἂν τις: the formulation with indefinite pronoun is one of Plutarch's standard ways of introducing his own objections, cf. *Stoic. rep.* 1049e, 1055a. There can be no doubt that what follows is Plutarch's argumentation, and not Chrysippus'.

(1) . . . and if one says that the assents do not happen because of fate, (2) since then false assents and false beliefs and deceptions would exist because of fate, and people would be harmed because of fate, (3) then the argument that exempts the sage from doing harm proves at the same time that fate is not the cause of all things.<sup>178</sup> (*Stoic. rep.* 1056a)

Provided the above reconstruction of the Sage Argument was adequate, the analogous argument in full should run more or less as follows:

- (P1) If fate is the <self-sufficient><sup>179</sup> cause of the assents, then if there are false assents, false beliefs, and deceptions in the world, fate does inflict harm. (2)
- (P2) There are false assents, false beliefs, and deceptions in the world. (2)
- (P3) Fate does not inflict harm. (implicit premiss)
- (C') Therefore, fate is not the <self-sufficient> cause of the assents. (1)
- (P4) If fate is not the <self-sufficient> cause of the assents, fate is not the <self-sufficient> cause of all things.
- (C) Therefore, fate is not the <self-sufficient> cause of all things. (3)

Premiss (P3) corresponds to the premiss 'sages do not inflict harm' of the Sage Argument. Although Plutarch does not explicitly mention (P3), it is plain from the context that he assumes it. Where he takes it from is unclear (he discusses related Stoic tenets in chapters 31–7 of *On Stoic Self-contradictions*); but it is certainly in accord with Chrysippus' view: fate, being the same as god and providence, will always be for the best.<sup>180</sup>

Plutarch's method is this: in order to rebut the Chrysippean principle he produces a formal parallel to a Chrysippean argument and makes use solely of Stoic premisses and uncontroversial assumptions. In the Sage Argument (see 6.3.4), Chrysippus wanted to prove that impressions are not self-sufficient causes of assents. By contrast, the demonstrandum in Plutarch's analogous argument ('fate is not the cause of all things, including assents') is the contradictory of a basic tenet of Chrysippus. Thus Plutarch builds up a self-contradiction by not only using premisses the Stoics appear to have to accept, but also borrowing from them their

<sup>178</sup> . . . λέγει μὴ διὰ τὴν εἰμαρμένην γίνεσθαι τὰς συγκαταθέσεις, ἐπεὶ διὰ τὴν εἰμαρμένην ἔσονται καὶ ψευδεῖς συγκαταθέσεις καὶ ὑπολήψεις καὶ ἀπάται καὶ βλαβήσονται διὰ τὴν εἰμαρμένην, ὁ τοῦ βλάπτειν τὸν σοφὸν ἐξαιρούμενος λόγος ἅμα καὶ τὸ μὴ πάντων αἰτίαν εἶναι τὴν εἰμαρμένην ἀποδείκνυσιν.

<sup>179</sup> Again, 'cause' has to be understood as 'self-sufficient cause' in the whole argument, as is clear from the context and from the subsequent sentence (quoted and discussed below). This has been rightly pointed out by Donini 1988, 26–7.

<sup>180</sup> Of course Chrysippus faces a problem here: if there is harm in the world, and fate/god/providence cause everything, then in some sense fate/god/providence cause harm. This is the problem of providence, which the Stoics tried to solve by distinguishing between the global perspective and that of individual human beings.

own type of argument.<sup>181</sup> This procedure may be complicated, but it is certainly clever.

The expected next step in Plutarch's reasoning would be that fate is only the procatactric cause and not the self-sufficient cause of all things. This becomes plain in *Stoic. rep.* 1056c–d (see below). But Plutarch skips this step, presumably regarding it as obvious, and immediately starts with the second horn of his dilemma. The transition, made explicit, should have been something like:

Now, if fate is a cause, and not self-sufficient, according to Chrysippus it must be procatactric.

before the second horn

But if someone stated that Chrysippus made fate not a self-sufficient cause of <all things>, but only their procatactric cause, he will prove him to be again in conflict with himself . . . (*Stoic. rep.* 1056b)

What follows are two arguments rather than one; each invokes bits of Chrysippus' doctrine of fate which Plutarch, it seems, takes directly from Chrysippus' writings; each time the present assumption is shown to contradict the omnipotence of fate: if fate is a procatactric cause, it (i) neither determines everything nor (ii) is invincible and unpreventable. Either way, Chrysippus contradicts himself. For elsewhere he holds that fate determines everything and that it is invincible and unpreventable.

In *Stoic. rep.* 1056c–d Plutarch sums up the dilemma: if fate is a self-sufficient cause, right and wrong actions, virtue and vice no longer depend on us;<sup>182</sup> if fate is a procatactric cause only, fate is no longer invincible, unpreventable, etc.<sup>183</sup> In this 'summary' Plutarch has shifted away from his original argumentation in two respects: he has abandoned his announced goal to show up a conflict between Chrysippus' theories of impressions and of fate; and he has modified the result of the first horn of his dilemma. We are now simply presented with a variation of the standard objection 'if fate causes everything, nothing depends on us'.<sup>184</sup>

<sup>181</sup> The subsequent sentence in *Stoic. rep.* 1056b (55.14–18 Teubner) is an additional step which is not required to disprove the principle that fate is the cause of everything (*εἰ γὰρ* in 55.14 does not make much sense, *εἰ δέ*, as X3, g, and B have it, fits better): it argues, by analogy only, that if fate does not cause certain bad things (false beliefs, etc.) it also does not cause the corresponding good things (true, steadfast beliefs, etc.), presumably since the kind of causation must be the same in both cases. The result is that there are more things of which fate is not (self-sufficient) cause. Presumably this was meant to make the argument even more damaging to Chrysippus.

<sup>182</sup> Cf. *Alex. Fat.* 207.5–21 for a use of those four expressions together in a similar Stoic context.

<sup>183</sup> The summary is followed by a brief appendix (*Stoic. rep.* 1056d–e) in which Plutarch produces a rather lame criticism of Chrysippus' thesis that the cosmos as a whole cannot be hindered or impeded.

<sup>184</sup> In the next passage (*Stoic. rep.* 1056e–1057a) Plutarch picks up again his initial project of showing the inconsistency between Stoic fate and the Stoic theory of impressions.

I now return to the controversy about whether Chrysippus identified fate and antecedent cause(s) (cf. above 6.3.6 and the framework story, 6.4.1). In our Plutarch passage this controversy revolves around the second horn of the dilemma. The point under debate is, who—if anyone—it was who stated that fate is merely a procatactic cause. Was it Chrysippus or Antipater, or someone else, or just Plutarch himself? The debate primarily concerns the (above-cited) introductory clause *ὁ δὲ λέγων, ὅτι Χρύσιππος οὐκ αὐτοτελῇ τούτων αἰτίαν ἀλλὰ προκαταρκτικὴν μόνον ἐποιεῖτο τὴν εἰμαρμένην . . .* (*Stoic. rep.* 1056b). The Greek text itself clearly permits all three of the following readings:

- (i) 'Should anybody whoever state that Chrysippus considered fate to be not the self-sufficient but only the procatactic cause of all things . . .', referring by this clause to a particular passage of an original Chrysippean work from which Plutarch is in fact drawing.<sup>185</sup>
- (ii) 'If someone claims—as some later Stoic actually does—that Chrysippus means that fate is not the sufficient but only the procatactic cause of all things . . .' in this way referring to some particular later interpretation of Chrysippus' position.<sup>186</sup>
- (iii) 'Should anybody whoever state that Chrysippus considered fate to be not the sufficient but only the procatactic cause of all things . . .' although Plutarch has no one in particular in mind and is not aware of anybody ever having said this.

Of these three possibilities the first can be discarded. As has been shown above, Plutarch discusses at length the two alternatives that fate is either a self-sufficient or a procatactic cause. Now, had Chrysippus himself stated anywhere in those of his writings from which Plutarch draws that fate is a procatactic cause, Plutarch would not have provided a complex argument in order to show that fate cannot be a self-sufficient cause in the way he does in *Stoic. rep.* 1056a–b.<sup>187</sup> On the assumption that Plutarch

This time he constructs a nested pair of dilemmas: either impressions are not fated, or, supposing they are, either all impressions and assents are faultless or fate is not faultless. (Thus the point that fate does no harm comes in again, as well.) Perhaps this was the argument Plutarch had in mind at the beginning (*Stoic. rep.* 1055f), and he got sidetracked. It is not very ingenious, since it presupposes that impressions are fully responsible for the subsequent assent—which is just what Chrysippus denied, as we were told by Plutarch in *Stoic. rep.* 1055f.

<sup>185</sup> Theiler 1946, 64 n. 129, Cherniss 1976, 595.

<sup>186</sup> Schmekel 1938, 269–71, Donini 1988.

<sup>187</sup> The passage Theiler (1946, 64 n. 129), quotes in order to back up (i), i.e. *Stoic. rep.* 1035e, differs in a crucial respect from the present one (and all other parallels in *On Stoic Self-contradictions*) in that it refers expressly to a particular Chrysippean work: 'But if someone says that Chrysippus, in his book "On . . ." has written . . .' (*εἰ δέ τις ἐρεῖ γεγραμέναι τὸν Χρύσιππον ἐν τῷ περὶ . . .*). For instance *Stoic. rep.* 1049e, *φήσει* and 1055a *φήσαι* introduce objections by Plutarch where he employs scraps of Chrysippean doctrine for his own purposes.



drew the Sage Argument from a work by Chrysippus this passage thus yields further evidence against the view that Chrysippus himself identified fate and (either procatactric or self-sufficient) antecedent causes.

The whole Plutarch passage (*Stoic. rep.* 1055f–1056d) strongly suggests that Chrysippus called fate neither a procatactric nor a self-sufficient cause. It is easy to conceive of how Plutarch developed the idea of constructing a dilemma based on those two alternatives: He took from Chrysippus' writings the thesis that fate is called 'Cause' (αἰτία, cf. e.g. *Stoic. rep.* 1055f where, in a report from Stoic doctrine, fate is called μέγιστη αἰτία, 'the mightiest cause' and 'cause of all things', αἰτία πάντων; cf. *Stoic. rep.* 1056b). He further obtained from Chrysippus' writings the distinction between self-sufficient and procatactric causes (αἴτιον or αἰτία)—presumably from the context of the Sage Argument, i.e. the debate over assent, fate, and what depends on us. Putting the two bits together Plutarch then inferred that fate, *qua* cause, must be either self-sufficient or procatactric, and subsequently set out to show that either assumption leads to a contradiction within Chrysippus' philosophy. (This method of constructing a dilemma by using a dichotomy of one's opponents is common in scepticism, cf. e.g. *SE PH* 2.48–69; 124–9.)

By applying the attributes 'self-sufficient' and 'procatactric' to fate, *qua* Cause, Plutarch, in fact, commits a category mistake. For, where Chrysippus gives fate the epithet 'Cause' (αἰτία), that has to be carefully distinguished from the use of 'cause' (αἴτιον/αἰτία) for particular, individual bodies in the world (just as for him there is a difference between ἀνάγκη and ἀναγκαῖον, ἀλήθεια and ἀληθές, etc., cf. above 1.4.2; 3.4). Moreover no source confirms that fate itself is a procatactric cause.<sup>188</sup> Note that Plutarch followed the same methodical procedure and committed the very same type of mistake in his argument concerning fate and possibility in *Stoic. rep.* 1055e (cf. 3.2) which directly precedes the present chapter. In neither case would I want to claim that he is unaware of his inaccuracy. It may be just another ingredient of his polemical method.

The other two sources that connect fate with non-necessitating antecedent causes do not commit a category mistake. In *Cic. Top.* 59 we learn that fate is made up from causes that seem to have properties similar to the procatactric causes and in *Cic. Fat.* 44 we learn that everything happens through fate in such a way that everything has an antecedent cause. Both times fate is identified with the 'network' or entirety of antecedent causes, not with a single procatactric cause.<sup>189</sup>

<sup>188</sup> See on these points also Donini 1988, in particular 30–1.

<sup>189</sup> Note also that, for reasons of consistency, the Plutarch passage can only be used to back up Cicero's *On Fate* if one assumes that *all* antecedent causes are procatactric, and thus not self-sufficient and non-necessitating. This is denied e.g. by M. Frede 1980, 237–8, Ioppolo 1994, section III.4, together with section IV.3, and others—although I believe it is correct, see Bobzien 1998b, section 6.

As to the remaining alternatives (ii) and (iii) of how to understand the phrase 'should someone say' (ὁ δὲ λέγων) in *Stoic. rep.* 1056b, it seems that even if one considers all the evidence, there is no way of deciding definitely between (iii) and a restricted version of (ii). As regards version (ii), it is certainly possible that Plutarch was acquainted with a view of some later Stoics that fate is the network of procatactric or antecedent causes. After all, Plutarch himself seems to have composed two books on fate and one entitled 'about that which depends on us, against the Stoics'<sup>190</sup> and in his restatement of the dilemma (1056c) and in the chapter on modalities (1055d–f) he invokes bits of standard arguments against fate which seem superior to his self-made ones. But even if this is so, we have to concede that Plutarch hardly did more than pick up the general idea that there exists some connection between fate and procatactric causes, and that he then distorted the Stoic view by committing the category mistake mentioned above. As to alternative (iii), that Plutarch has no particular philosopher in mind, it fits the general evidence equally well as the previous one. (It may speak in favour of (iii) that the first horn of the dilemma, which—as has been shown—does not present the view of any particular philosopher, is also introduced with a singular indefinite pronoun: ταῦτ' οὖν ἄν τις . . . λέγῃ. . . .)

In conclusion, we can rule out (i) that Plutarch, when stating that fate is a procatactric cause, reports a view he took directly from Chrysippus. Hence the passage cannot be adduced as evidence for the interpretation that for Chrysippus fate is the same as the procatactric, or proximate and auxiliary, antecedent causes. On the contrary, the passage rather supplies some reasons against this assumption. There is insufficient evidence for a decision between (iii) the view that all we have is a purely fictitious assumption of Plutarch's (made for his polemical purpose) and (ii) the view that this is a—distorted—report of a later Stoic (or sympathizing) interpretation of Chrysippus. Should the latter be the case, it is likely that this ultimately goes back to the same philosopher from whom Cicero draws in *Fat.* 44–45, and presumably again, in *Top.* 59, i.e. perhaps Posidonius or Antiochus.<sup>191</sup>

<sup>190</sup> *Περὶ εἰμαρμένης β'*, Lamprias cat. no. 56 and 'περὶ τοῦ ἐφ' ἡμῶν πρὸς τοὺς Στωικούς', Lamprias cat. no. 154; they are lost. In chs. 46 and 47 of *On Stoic self-contradictions* Plutarch may be drawing from these works. This would explain why, unlike in most of the other chapters, he adduces no Chrysippean book titles in these chapters.

<sup>191</sup> I cannot see any reason why this should have been Antipater. Theiler's criticism of Schmekel seems to be correct in this respect (1946, 64 n. 129).

## Freedom and That Which Depends on Us: Epictetus and Early Stoics

In Chrysippus' arguments for the compatibility of fate and moral responsibility we encountered no word for freedom. The freedom we identified as relevant to the arguments was freedom from external hindrances and from force. It was referred to generally by negative phrases like 'not externally hindered', 'not necessitated', but not by a single term or noun phrase; and it was regarded as a necessary condition for something's depending on us and happening because of us. By 'that which depends on us' (*in nostra potestate*, ἐφ' ἡμῶν) and 'that which happens because of us' (παρ' ἡμᾶς) Chrysippus seems to have understood simply the things (mainly actions) of which we, *qua* rational beings, are the possible or actual cause. Such causal origination is brought about by the faculty of assent. The freedom from force and external hindrances was guaranteed by the use of this very mechanism through which we become the cause of our actions. For it is part of the nature of this mental capacity that human assent is neither forced nor fully externally determined.

In the whole discussion of compatibilism we did not come upon the one Greek noun that is standardly translated as 'freedom', i.e. ἐλευθερία, or its cognate adjective ἐλεύθερος, 'free'. However, these expressions no doubt denote freedom in some sense, and they play an important role in Stoic philosophy. Freedom<sup>1</sup> was an indispensable philosophical concept in early Stoic ethics, and became central in the moral philosophy of the Roman Stoa.

The Stoic notion of freedom (ἐλευθερία) has been a source of modern misinterpretation and mis-assessment of the early Stoic theory of fate and of Chrysippus' compatibilism. In particular, it has been confounded with the early Stoic or Chrysippean notion of that which depends on us. There are several reasons for this persistent confusion, including the facts

- that in modern discussions of free-will, concepts similar both to the Stoic concept of freedom and to the early Stoic concept of that which depends on us have frequently been connected, and connected in various ways;

<sup>1</sup> In this chapter I use the expressions 'freedom' and 'free' for the Greek ἐλευθερία and ἐλεύθερος, unless stated otherwise.

- that the English words ‘free’ and ‘freedom’ cover both of the two Stoic concepts;
- that the Stoic Epictetus linked the two concepts in his philosophy;
- that in later (post-Epictetan) antiquity the two terms τὸ ἐφ’ ἡμῶν and ἐλευθερία were often linked and sometimes used almost synonymously.

There is, however, no evidence that the Stoic concept of freedom and the question of that which depends on us were connected in any way before the Roman Stoa.

Both the concept of what is ἐφ’ ἡμῶν and the concept of ἐλευθερία are central to the part of Epictetus’ philosophy which is extant, recorded by his pupil Arrian.<sup>2</sup> I shall consider these two Epictetan concepts, their relation to each other and to the corresponding concepts of the early Stoics, and the specific philosophical context in which they belong. Here is of course not the place to give a detailed analysis of Epictetus’ philosophy of freedom through self-restriction. I confine myself to pointing out some changes in emphasis, interest, topics, and use of terminology in Epictetus, in order to be able to outline the main differences between his and the early Stoic theory. (Epicurus’ concept of προαίρεσις and its influence on the development of a concept of indeterminist freedom is considered briefly below in 8.7.)

This chapter contains first an analysis of Epictetus’ concept of that which depends on us and how it relates to the early Stoic concept (7.1); then an outline of the Stoic notion of freedom, its role in Stoic philosophy, and its connection with the concept of that which depends on us (7.2); finally, a discussion of a couple of passages which are often wrongly associated with early Stoic compatibilism, and belong rather in the wider context of Epictetan ethics (7.3).

## 7.1 EPICTETUS AND THAT WHICH DEPENDS ON US

Chrysippus dealt with the concept of that which depends on us in the part of Stoic philosophy they called ‘physics’, demonstrating the compatibility of this concept with his theory of fate. He ensured that the things commonly seen to depend on us are preserved in his philosophy, by placing the origin of those things in the human mind and its capacity to give assent. That which depends on us is thus embedded in a psychological theory. Given that the existence of things that depend on us was considered a

<sup>2</sup> Epictetus (AD c.55–c.135) was a pupil of the Stoic Musonius (AD c.30–c.100), and for most of the following points we find some related ideas in the few extant fragments of Musonius (in Stobaeus); this makes it likely that Epictetus took over many of these ideas from his teacher.

necessary condition for moral responsibility, Chrysippus thus secured a basic prerequisite for ethics. But there is no clear evidence that the notion of that which depends on us was topical *within* early Stoic ethics. Chrysippus also did not ask what the things were which depend on us. It appears that he took it for granted that there was general agreement about that question. For Epictetus, on the other hand, the main concern is which the particular kinds of things are that depend on us. The two topics were also terminologically differentiated: Chrysippus was concerned with what was later called τὸ ἐφ' ἡμῶν; Epictetus is primarily interested in τὰ ἐφ' ἡμῶν, i.e. the kinds of things that depend on us.<sup>3</sup> With this difference in interest there goes hand in hand a difference in how the expression 'depending on us' is used. According to Chrysippus, something depends on me if I, *qua* rational being, am causally responsible either for its occurring (by assenting to the relevant impression), or for its not occurring (by withholding assent to the relevant impression). Hence (i) the element of causation, and in this sense, of self-origination is predominant, and (ii) in order to determine whether something depends on me, the individual case has to be examined. In Epictetus (i) the element of causation is not discussed, and the factor of self-origination is seldom emphasized, although the occasional use of phrases like κύριος and ἀντρεξούσιος suggests that it was presupposed. Moreover (ii), in order to establish whether some particular thing depends on someone, it seems that for Epictetus what matters is whether it belongs to a class of things that *cannot* be externally hindered or forced. This means that, whereas according to Chrysippus, if I take a walk and nothing hinders me from walking, my walking depends on me (I caused it by assenting to an impulsive impression of the kind 'you should take a walk'), for Epictetus it seems not to depend on me, since in principle something *could* prevent me from walking, even if in this case nothing does (cf. *Diss.* 4.1.68–73). Thus for Epictetus the modality of the expression 'depending on us' has changed and he singles out as things that depend on us only those types of things which are in our power under all possible circumstances and with absolute certainty. He is concerned to identify the things (activities, behaviour) that in the course of one's life can in no circumstances be prevented or spoiled by external factors, including other people's interference. It is the question of someone who plans their future life and actions and wants to know which factors of their future life can be relied on with certainty.

<sup>3</sup> For Chrysippus neither of the substantivized forms is known. Τὸ ἐφ' ἡμῶν occurs in Plutarch *Stoic. rep.* 1056d and in a book-title περὶ τοῦ ἐφ' ἡμῶν πρὸς τοὺς Στωικοὺς Lamprias cat. no. 154. I have not found τὰ ἐφ' ἡμῶν as (semi-)technical term in any Stoic text before Musonius. (I take the explanatory clause about things that depend on us in Epiph. *Haer.* 3.36 (*DD* 592.25–6), which is ascribed to Zeno, to be later and not originally Zenonian.

The motivation for such questions—as it is usually presented by Epictetus—is to determine how one can avoid failures and disappointments and how one can keep or attain an undisturbed and well-poised emotional state. That is, the motivation is chiefly prudential and pragmatic: if one is aware of the limits of one's power, one's future plans will be more realistic (they will probably include more ifs and whens)<sup>4</sup> and consequently one's future disappointments will be minimized. The field is thus practical philosophy and ethics inasmuch as ethics helps one to attain happiness (*εὐδαιμονία*). For, and not surprisingly, the only way to minimize frustration and to subsequently acquire true happiness is by consistently pursuing the morally right end (*τέλος*), which is, in one common Stoic description, to live in accordance with Nature. The perspective from which that which depends on us is discussed has thus become a perspective towards the future, concerned with guidance of actions and behaviour; before, in Chrysippus and the old Stoa it primarily was a backwards perspective or time independent, concerned with the attribution of responsibility and with the moral assessment of actions.

Accordingly, for Epictetus, the range of things that satisfy the condition of depending on us is much more limited than it was 'traditionally'. He puts in the class of the things that depend on us (*τὰ ἐφ' ἡμῶν*) primarily—or perhaps even exclusively—the 'use of impressions' (*ἡ χρῆσις τῶν φαντασιῶν*) which for him means primarily our assents and the impulses and beliefs we have as a consequence of assenting.<sup>5</sup> In the class of things that do not depend on us (*τὰ οὐκ ἐφ' ἡμῶν*) he puts everything else that has some influence on our life, i.e. our (positive) actions, the results of our activities, the things called 'indifferents' in Stoic ethics, like health, wealth, life, death—and, as Chrysippus and the tradition had done, the externally induced impressions themselves.<sup>6</sup> One can easily see how this restriction was brought about: If we use the Epictetan criterion for what depends on us for future actions, the result is meagre. For nearly every activity that involves intentional bodily movements however small, we can imagine some external obstacles that will prevent it from being carried out. With (positive) actions such as walking, eating, or escaping one's enemy, we can never be sure whether they will be in our power. Things look a bit better in cases in which assent is given in favour of not being active, i.e. in favour of refraining from action. In those cases one can argue (as Epictetus in effect does) that external influences cannot prevent one

<sup>4</sup> Cf. Inwood 1985, 119–26 and 165–75, for 'reservation' (*ὑπεξαίρεσις*) in Seneca and Epictetus.

<sup>5</sup> These also depend on us according to Chrysippus, cf. Cic. *Fat.* 40–3; Gell. *NA* 7.2.11.

<sup>6</sup> For Epictetus, typical passages are: *Ench.* 1, 2 and 5; *Diss.* 1.1.7; 1.1.12; 1.1.22–3; 1.6.40; 1.12.34; 1.22.10; 2.5.8; 2.19.32; 3.24.3; 3.24.69; 3.24.108; 4.1.68–75. For Musonius, see Stob. *Ecl.* II 159.25–160.11 (fr. 38 Hense).

from 'inactivity'.<sup>7</sup> But the safest bets are assent and intention. External hindrances are not conceivable there. Neither natural nor human force can prevent them from occurring, as Epictetus never tires of repeating. For Epictetus, assent, intention, and refraining from action depend on us, because we have the general ability to perform them, and no one and nothing external to us has the power of interfering and keeping us from performing them.

Philosophically there is perhaps less of a difference between Epictetus and the early Stoa than this account makes one think. The underlying general idea of which occurrences (*γιννόμενα*) count as depending on us seems to be the same as for Chrysippus: in order to depend on us an event/occurrence (i) has to be originated by us, hence we must not be forced, and (ii) must not be prevented by external circumstances. But Epictetus is not concerned with establishing that there are things that depend on us. Rather he employs the concept of that which depends on us within ethics, and although such an application is not recorded for early Stoic ethics, we can easily see how Epictetus' concept of that which depends on us fits in with it. Antipater had determined the end (*τέλος*) of human life as

to do everything in one's power continuously and undeviatingly with a view to obtaining the predominating things which accord with nature.<sup>8</sup> (Stob. *Ecl.* II 76.13–15, trans. Long/Sedley 59k)

What Antipater had in mind becomes clearer from the archer analogy, in which human agents are compared to archers, in order to illustrate the difference between the end of life, and one's objectives (Cic. *Fin.* III 22). In this analogy the Stoics distinguished between the archer's aiming straight at the target (the archer's end) and actually striking the target (the archer's objective). Accordingly, the end of life is doing everything to attain one's objective; from this has to be distinguished the actual achieving of the objective. Of these only the former is in our power. Here Epictetus comes in with the expression 'that which depends on us': he uses it to denote the realm within which we can do everything to attain our objective, and he relegates the actual achieving of the objective (or not, depending on the circumstances) to the sphere of that which does not depend on us.<sup>9</sup>

This, it seems to me, is all there is to Epictetus' concept of that which depends on us. There is no evidence that this concept had anything to do with the choice between alternatives, let alone free (causally undetermined)

<sup>7</sup> e.g. *Diss.* 1.1.22–4.

<sup>8</sup> Πάν τὸ καθ' αὐτὸν ποιεῖν διηλεκῶς καὶ ἀπαραβάτως πρὸς τὸ τυγχάνειν τῶν προηγουμένων κατὰ φύσιν.

<sup>9</sup> This use of τὰ ἐφ' ἡμῶν within ethics may well go back to Stoics earlier than Epictetus. But we have no evidence for this.

decision, or agent causality. (Behind it there lies the ‘I-cannot-be-bribed-or-blackmailed-into-doing-certain-things’ idea of freedom.) As in the case of Chrysippus, there is no hint that Epictetus considered whether in the same circumstances the same person, with the same desires and beliefs, can do otherwise, in the sense that they are causally undetermined in what they do. The interpretation that according to Epictetus we are causally undetermined in deciding whether we give assent and whether we want something (in the sense that in the narrow boundaries of that which depends on us we are not causally predetermined in our choice) is simply wrong.<sup>10</sup> Epictetus does not reflect upon our ability to choose between performing or not performing an activity. Rather, in some sense, such an ability seems always implicitly presupposed.<sup>11</sup> Suppose, for example, that I am externally forced to go to prison. If I then happen to choose not to go, my choice will be frustrated, inasmuch as the object of my willing is externally prevented from realization. If, complying with god’s plan, I happen to choose to go to prison, my choice will not be frustrated. In the same way my choice will never be frustrated in cases in which I ‘choose’ to give assent or to have an intention to do something. But, as far as the act of choice itself and its determinedness are concerned, there is no difference in all these cases—whether or not my choice is frustrated.

The passage(s) in which Epictetus says that even god cannot prevent or hinder us in the case of things that depend on us (e.g. *Diss.* 1.6.40) cannot be invoked to back up the claim that Epictetus deals with free choice. God’s inability to interfere does not mean that, say, I can give assent to some impression although god does not want me to, but is unfortunately unable to prevent me. The point is rather (as usual) that assent and intention, on the ground of their very nature, cannot be subjected to coercion or force, which includes possible coercion or force exercised by god. Epictetus’ occasional use of the term *αὐτεξούσιος* (‘under one’s own authority’) in the context of the discussion of things that depend on us does not indicate any concern with the topic of undetermined choice either. In later texts *τὸ αὐτεξούσιον* becomes synonymous with *τὸ ἐφ’ ἡμῶν* (see below

<sup>10</sup> A more recent advocate of this view is Dobbin 1991, e.g. 121, 133. Generally, this interpretation assumes that for Epictetus we have *no choice* in the case of things that do not depend on us, e.g. whether we go to prison. Independently of what we decide or want, if we have to go, we will have to go; but that we have undetermined *free choice* in the case of things that depend on us: we cannot choose whether or not we will go to prison, but it is a matter of undetermined choice whether or not we accept (give assent in favour of) going to prison, and whether we go to prison willingly or unwillingly.

<sup>11</sup> Within the realm of that which depends on us we are repeatedly advised to go for those things that are in accordance with nature and to avoid those that are contrary to nature; cf. e.g. *Ench.* 2, 48.3; *Diss.* 3.10.10–11, 3.11.15, 3.24.101–2; but there is no reason to assume that Epictetus presupposed a capacity for causally undetermined choice. Equally *προαίρεσις*, often rendered as ‘moral choice’ is never characterized as *causally undetermined* choice by Epictetus, nor does it imply indeterminateness.



7.3.3.2), and sometimes involves the ability to choose freely or to start a motion without preceding cause, but in Epictetus it does not have these connotations. Epictetus clearly contrasts *αὐτεξούσιος* with someone else's power or authority (*ἐξουσία*) over oneself. *Αὐτεξούσιος* indicates that something is outside the sphere of influence of others, and in the sphere of one's own influence. That is, we have the same contrasts of the possibility of external hindrances and the absence of that possibility, and of heteronomy and autonomy, as in the distinction between 'things that depend on us' and 'things that do not depend on us'.<sup>12</sup>

The absence of concern with the topic of freedom of decision is familiar from Chrysippus and the early Stoics. Similarly, despite a difference in the use of expressions, there seems to be little difference between Epictetus' and the early Stoic position on moral responsibility. In the extant works, Epictetus never considers the problem of whether it is consistent with Stoic philosophy in general to maintain that people are morally responsible for some things. But he deals with the questions of praise and blame and moral accountability within ethics. Praise and blame occur in two different contexts: On the one hand, praise and blame, reward and punishment are some among those external things from the influence and importance of which one should try to free oneself, precisely because they are not in our power (e.g. *Diss.* 2.13.2; 2.16.6–11). In a similar vein we learn that we should not praise or blame others—presumably because this diminishes the chances for our moral progress (*Ench.* 48.2). On the other hand, there is the occasional remark that the moral goodness and badness and the praiseworthiness and blameworthiness of an action do not depend on external factors, but are always derivative of the morally right or wrong beliefs or principles (*δόγματα*) from which the agent acts (*Diss.* 4.4.44; 4.8.1–4). We may praise or blame an agent for an action only insofar as it was brought about as the result of the right or wrong use made of the impressions. In line with this we learn that we are morally accountable (*ὑπεύθυνος*) only for those things that depend on us (*Diss.* 1.12.32–5). Thus Chrysippus and Epictetus agree fully on the point that actions are praiseworthy and blameworthy only insofar as they are the result of an act of assent to an impulsive impression—only that Epictetus seems to restrict the terms 'depending on us' and 'accountable for' to the use we make of our impressions, whereas Chrysippus allowed at least the first one to be applied to actions as well—if only derivatively.<sup>13</sup> (Since he appears

<sup>12</sup> Cf. the use of *ἐξουσίαν ἔχειν* in *Diss.* 4.7.16 *εἰς ἐμὲ οὐδεὶς ἐξουσίαν ἔχει. ἡλευθέρωμαι ὑπὸ τοῦ θεοῦ* (see also 1.25.2, 4.12.8) with the use of *αὐτεξούσιον* in 4.1.62 *τί οὖν ἐστὶ τὸ ποιῶν ἀκώλυτον τὸν ἄνθρωπον καὶ αὐτεξούσιον . . .* and 4.1.68 *πότερον οὖν οὐδὲν ἔχεις αὐτεξούσιον, ὃ ἐπὶ μόνῳ ἐστὶ σοί . . .*

<sup>13</sup> The use of the phrase *παρ' ἡμᾶς γίνεσθαι* ('to happen because of us') was extended even to the consequences of our actions and omissions, see 5.3.

to hold that actions take place in the mind, the discrepancy is even smaller than it may seem; see 6.1.2.) As for the individual cases in which someone is held responsible, i.e. for individual assent-action combinations as it were, there should be no disagreement in principle between the two philosophers. Again, the difference is rather one of perspective. The change of viewpoint in Epictetus' treatment of that which depends on us has its reason in a shift of topic, interest, and emphasis from the question of the possibility of moral accountability to the guidance of action. There is no indication that it is the result of any discontent on Epictetus' part with early Stoic or Chrysippean compatibilism—as appears to be the case in the Middle Platonist theory of fate, in Posidonius, and elsewhere. Rather, it seems that the theoretical, abstract question of the compatibility of fate and that which depends on us has completely dropped out of sight in Epictetus' extant works. His conception of that which depends on us is *basically independent* of whether or not everything is fated.

It is likely that both Epictetus' teacher Musonius and Epictetus himself believed that, in the end, everything is predetermined. Musonius, it seems, may have stuck at least to the spirit of universal fate-determinism. For him the statement is reported that whatever happens cannot happen otherwise.<sup>14</sup> Epictetus appears to have avoided talking about fate (*ἐιμαρμένη*) *qua* network of causes and the Chrysippean theory of causal determinism. He repeatedly employed Cleanthes' verses on destiny (*πεπρωμένη*) for practical purposes; the concept of destiny used is that of personal fate, i.e. the common belief that the gods allot to every person their destiny.<sup>15</sup> The one time when Epictetus speaks *in propria persona* about 'destiny' (*Diss.* 1.12.25), we are presented with the idea of personal fate, too, and the terminology seems to be borrowed from Cleanthes' verses. There can be little doubt that Epictetus was convinced that god was responsible for what happens in the world, and that he preordained everything (*Diss.* 1.12.15–17). But his remarks are so vague that one cannot make out whether god's predetermination concerns general matters only, or particulars as well; and no connection is drawn to the causal interconnectedness of things.

To conclude, the role of that which depends on us in Epictetus' philosophy (as far as it has come down to us) differs noticeably from the function it has for the early Stoa (as far as their philosophy has come down to us): In early Stoic philosophy the notion of that which depends on us has its place in physics—more precisely, in Stoic psychology. It has the function of preserving the possibility of moral responsibility. It is thus a

<sup>14</sup> Stob. *Ecl.* IV 44, 60 (fr. 42 Hense), *ὅτι τοιαύτη ἡ τοῦ κόσμου φύσις καὶ ἦν καὶ ἔστι καὶ ἔσται καὶ οὐχ οἷόν τε ἄλλως γίνεσθαι τὰ γινόμενα ἢ ὡς νῦν ἔχει.*

<sup>15</sup> *Ench.* 53.1, *Diss.* 2.23.42, 3.22.95, 4.1.131, 4.4.34; discussed below in 7.3.1 and 2.

basic precondition for ethics, but not itself part of ethics. For Epictetus, the notion of that which depends on us serves—on the basis of an already established theory of morals—a predominantly practical purpose. It has its role within ethics. It is intended to provide a means that helps people to plan and lead a good and undisturbed life. Its primary function is guidance of life and actions. Despite the different primary function assigned to the concept of that which depends on us, there is little difference between Chrysippus and Epictetus in the relevant parts of Stoic philosophy—except that in his extant works Epictetus shows no signs of any critical awareness of the problem of compatibilism. Epictetus' concept of that which depends on us—like that of Chrysippus—is not concerned with indeterminist freedom of decision or freedom to do otherwise.

## 7.2 FREEDOM (ἐλευθερία)

Ἐλεύθερος ('free') and ἐλευθερία ('freedom') were originally political terms. On the level of the polis, freedom denoted the absence of tyranny; in the relation between the polis and others, and on the level of individual persons, it stood for the opposite of enslavement.<sup>16</sup> In these political uses, freedom is contrasted with the dependency on someone else: it is the contrast between heteronomy or other-determination, and autonomy or self-determination. Philosophers soon made metaphorical use of this contrast between freedom on the one hand, and slavery and tyranny on the other. In ethics, the external, legal or physical, freedom from the forces of tyranny and slavery is replaced by internal, psychological freedom: in order to be free, one must not be the slave of one's passions, or under the tyranny of one's desires for external, material goods. This is the freedom from certain inner-psychic determining factors (freedom of type F6, see 6.3.5). Such psychological freedom is regarded as a prerequisite for a good and happy life. Again, heteronomy, this time the determination by passions or desires (which are regarded as separable from oneself) is opposed to autonomy or the agents' being in control of themselves.<sup>17</sup> In these contexts of politics and ethics, freedom is never the freedom to decide between alternative courses of actions, or the power to do otherwise, or causal indeterminateness; nor is it ever connected with a two-sided potestative concept of that which depends on us. It is always the freedom

<sup>16</sup> For the complex history of the terms ἐλεύθερος and ἐλευθερία, see e.g. Nestle 1967, 1972, and Raaflaub 1985.

<sup>17</sup> The metaphor is also used in the context of fate: rejecting fate, Epicurus calls it a master (or rather mistress, δεσπότις) who enslaves (δουλεύειν), and he claims that what happens because of us (τὸ παρ' ἡμᾶς) has no master (is ἀδέσποτον), viz. has no master other than ourselves (DL 10.133–4).

of an individual (or group of individuals) from certain external or internal determining factors, thus providing a sphere in which the individuals are masters of their own affairs.

The Stoic philosophical concept of freedom (ἐλευθερία) has its origin in the metaphorical, ethical, use of 'free' (ἐλεύθερος). It is the concept of psychological freedom, taken to its extremes; it requires total independence of the person from all passions and from all wrong desires. Not surprisingly, only sages can obtain this freedom.

### 7.2.1 The early Stoics on freedom (ἐλευθερία)

In Stoic philosophy, the concept of freedom was dealt with from its very beginning; but there are few testimonies about freedom that can be assigned with certainty to the early Stoa. In Diogenes Laertius we find a passage from Zeno's *Republic* where he declares that 'only the wise or virtuous are true citizens or friends or kindred or free men (ἐλευθέροις)', and that all those who are not wise are 'enemies, slaves, and aliens to one another'.<sup>18</sup> Then we have from Zeno a modification of a Sophoclean verse on free-men and slaves, in which the freedom of the wise must be the underlying idea:

And Zeno revised the following verses of Sophocles

Whoever comes to traffic with a tyrant,

Will be his slave, even if he has come a free man,

and rewrote them as

Won't be a slave, if he has come a free man,

'free' now signifying someone who is fearless, magnanimous, and not humbled.<sup>19</sup> (Plut. *Aud. poet.* 33d)

Cleanthes wrote a whole book on freedom (DL 7.175), but apart from its title nothing has survived.<sup>20</sup> We have nothing at all on freedom that is attributed directly to Chrysippus. Of the passages listed in von Arnim that deal with freedom, four more might reasonably be thought of as early

<sup>18</sup> DL 7.32–3, with parallels in Cic. *pro Mur.* 61.

<sup>19</sup> καὶ ὁ Ζήνων ἐπαγορεύμενος τὸ τοῦ Σοφοκλέους  
ὅστις δὲ πρὸς τύραννον ἐμπορεύεται,  
κείνου ὅτι δοῦλος, καὶ ἐλεύθερος μὴ  
μετέγραφεν

οὐκ ἔστι δοῦλος, ἀν ἐλεύθερος μὴ

τῷ ἐλευθέρῳ νῦν συνεκφαίνων τὸν ἀδελφὴ καὶ μεγαλόφρονα καὶ ἀταπεινῶτον

(Cf. Epict. *Diss.* 4.6.8: ἀτάραχος καὶ ἀταπεινῶτος καὶ ἐλεύθερος.)

<sup>20</sup> Perhaps Philo's book *On the fact that the wise are free* and the fifth of Cicero's *Stoic Paradoxes* on the same topic may give us some general idea of the issues that Cleanthes dealt with.

Stoic.<sup>21</sup> They are Stob. *Ecl.* II 101.15–20, Cic. *Fin.* III 75 and *Acad.* II 136, and DL 7.121. This last passage gives a definition of freedom, as *ἐξουσία αὐτοπραγίας*.<sup>22</sup> We know that Chrysippus used *αὐτοπραγία* in the sense of ‘doing what is one’s own’.<sup>23</sup> Accordingly, freedom would then be the power of managing one’s own things. That is, you are free if you have the power of doing what you want or what you should do. This is in harmony with Philo, who, when discussing the freedom of the virtuous, quotes Zeno as having said that no one could ‘force any wise person to do unwillingly anything that they do not want to do’.<sup>24</sup>

All testimonies on Stoic freedom (*ἐλευθερία*), without exception, belong to ethics or politics.<sup>25</sup> ‘Freedom’ and being ‘free’ are typically contrasted with ‘slavery’ (*δουλεία*) and being a ‘slave’ (*δοῦλος*), and the philosophical use of the concepts in ethics seems to have taken its origin from the analogy with politics and public life, as in Zeno’s *Republic* (see above). Most sources make the point that only the sage is (truly) free whereas common mortals are all (truly) slaves.<sup>26</sup> Freedom is further typically cited as one of a number of positive attributes all of which belong only to wise persons;<sup>27</sup> in early sources often with political attributes, later with any attributes of virtue. ‘True’ freedom depends on the disposition (*διάθεσις*) of the wise person’s soul, which is stable and in a state of ideal tension. As regards freedom, this state of soul has a twofold effect on the person’s behaviour: internally, the one who is free is master of his passions;<sup>28</sup> externally, the one who is free cannot be bribed or blackmailed into actions which he does not want to perform.<sup>29</sup> The reason is that the wise and truly free do not have any desires to which bribes or blackmails could latch on. Both passions and desires are a species of belief for the Stoics. The wise are thus free, if they have the right beliefs (*ὀρθὴ δόξα*, see Philo on Zeno above), and in particular do not have any wrong or false beliefs of the kind that are passions or desires. Being one’s own authority, or in control of

<sup>21</sup> As to the remaining passages quoted by von Arnim (*SVF* iii. 359–64 from Philo’s *On the fact that the wise are free*, 603, from Philo’s *On Sobriety*, and *SVF* iii. 356 and 365 from Dio Chrysostom), they do not mention Stoics at all, and although clearly Stoicizing, must contain material later than Chrysippus.

<sup>22</sup> Similarly, Origen reports, as opinion of ‘the Greeks’, *καὶ μόνον καὶ πάντα τὸν σόφον εἶναι ἐλεύθερον, ἐξουσίαν αὐτοπραγίας ἀπὸ τοῦ θείου νόμου ἐληφότα* (*Evang. Ioannis*. II 10).

<sup>23</sup> *Tὰ αὐτοῦ πράττειν*, Plut. *Stoic. rep.* 1043b.

<sup>24</sup> Cf. *Quod omnis probus liber* 97, τὸ *Ζηρώνειον ἐπιφωνήσαι, ὅτι “θᾶπτον ἂν ἀσκὸν βαπτίσαι τις πλήρη πνεύματος ἢ βιάσαιτο τῶν σπουδαίων ὄντιν οὖν ἄκοντα δρᾶσαι τι τῶν ἀβουλήτων”*.

<sup>25</sup> This holds also of the later passages in Philo’s *Quod omnis probus liber* and of Dio Chrysostom, and of Cicero’s fifth Stoic paradox.

<sup>26</sup> e.g. DL 7.32–3; Stob. *Ecl.* II 101, 15–20; Cic. *Acad.* II 136.

<sup>27</sup> e.g. DL 7.32–3; Cic. *Acad.* II 136.

<sup>28</sup> *Nec obediens cupiditati*, Cic. *Fin.* III 75.

<sup>29</sup> *Nec dominationi cuiusquam parens*, *ibid.*

oneself, thus does not mean that some reasoning part of the soul is in control of some appetitive or emotive part of the soul (there are no such parts, see 6.1.2, 6.3.5). Rather, in order to become free, or master of oneself, one has to rid oneself of false (emotive) beliefs, and replace them by true beliefs about what is desirable and what is not. Stoic freedom is thus internal or psychological freedom, i.e. it depends entirely on the state of the mind of the person, and—in line with the Stoic cognitivist theory of passions and desires—someone's freedom can be reduced to the beliefs that person holds, and the firmness with which they are held.

In none of the testimonies on early Stoics is there any connection drawn between this concept of freedom and that which depends on us (ἐφ' ἡμῶν).<sup>30</sup> Freedom, as I have said, belongs exclusively to ethics (including politics); that which depends on us belongs to physics, in particular to psychology. The function and purpose of the two concepts in early Stoic philosophy are quite different. Only the wise are free, but wise and non-wise people alike are responsible for their actions; their actions depend on them in exactly the same way. Whether I am a slave of my passions or bribed into actions by other people, I am accountable for my deeds and omissions in exactly the same way as the wise person is.<sup>31</sup>

There is also no mention of the wise having more choices or possibilities in their actions; they differ from common people rather in that they always follow up the right choices and are not tempted by the wrong alternatives. This is not to deny that by performing certain actions one widens one's future choices, by performing others one narrows them down—with 'choices' here referring to those possible courses of actions that one is neither externally hindered nor forced to follow up. And it cannot be ruled out that on balance the wise may end up with more such choices. However, sages, *qua* being wise, will have usually only one option they can take. For there is generally only one morally right choice, whereas there are many ways in which one can go wrong.

### 7.2.2 Epictetus on freedom (ἐλευθερία)

The concept of freedom is central to Epictetus' philosophy as it has survived. We have an extensive essay especially on that topic (*Diss.* 4.1), and freedom plays a prevalent role in numerous other essays. There seems to be little difference between Epictetus' concept of freedom and the early Stoic one. But again, there is a shift in emphasis. According to Epictetus,

<sup>30</sup> Note also that Cicero deals with both topics, with *eleutheria* (*libertas*) in his *Stoic Paradoxes*, with the Stoic position on that which depends on us in his *On Fate*, and that he draws no connection at all between the two.

<sup>31</sup> The difference between the early Stoic concept of that which depends on us and the early Stoic concept of ἐλευθερία has been aptly pointed out by Stough 1978, 224.

the free person is 'someone who lives as he wills, who is neither necessitated nor hindered nor forced, whose impulses are unhampered, whose desires reach their end . . .' (*Diss.* 4.1.1); and again, 'someone for whom all things happen in accordance with choice and whom none can constrain' (*Diss.* 1.12.9) and someone 'who is rid of pain, fear, and trouble' (*Diss.* 2.1.24).<sup>32</sup> As in the early Stoa, so in Epictetus, freedom is a moral quality which only wise people possess, and it is frequently opposed to slavery (e.g. *Diss.* 2.2.13). It is not connected primarily with actions, but is linked to persons and their character dispositions or states of mind. But in Epictetus freedom occurs typically within a group of terms that are connected with tranquillity of mind, such as ἀταραξία, ἀπάθεια, ἀκώλυτος.<sup>33</sup>

What mainly concerns us here is how Epictetus sees the relation between freedom and that which depends on us. Unlike the early Stoics, Epictetus expressly made the connection between the two concepts, and it is essential for an understanding of his philosophy to comprehend their relation. The relation between his notions of that which depends on us and his notion of freedom is then as follows: Freedom is a virtuous state of mind, desirable and to be aimed at. In order to achieve this virtue you must (i) know exactly what things depend on you and (ii) align your desires, life plan, etc. in such a way that you only ever want what depends on you and expect only what is within the boundaries of what depends on you—which is restricted to the 'the use of your impressions' (cf. 7.1). In short, you possess freedom if, knowing what depends on you, you do not ever desire or deplore anything that does not depend on you.<sup>34</sup> Such a relation between freedom and that which depends on us is conceivable only with Epictetus' modified understanding of what depends on us. Chrysippus' conception of it does not admit of such a relation. For whether a particular thing, an action, say, depends on us in the Chrysippean sense is contingent upon whether there are hindrances at the time of the attempted performance, and frequently agents will learn about them only when they actually try to act. Nevertheless, for Epictetus, as for the early Stoics, in general there are no more things that depend on the free sage than there are that depend on common people. The only difference is that the sage knows about the restrictions of that which depends on us. As to moral

<sup>32</sup> Ἐλεύθερός ἐστιν ὁ ζῶν ὡς βούλεται, ὃν οὐτ' ἀναγκάσαι ἔστιν οὔτε κωλύσαι οὔτε βιάσασθαι, οὐδ' αἱ ὀρμαὶ ἀνεμπόδιοι, αἱ ὀρέξεις ἐπιτευκτικαί . . . , . . . ᾧ γίνεται πάντα κατὰ προαίρεσιν καὶ ὃν οὐδεὶς δύναται κωλύσαι, . . . ὅστις δ' ἀπήλλακται λυπῶν καὶ φόβων καὶ ταραχῶν.

<sup>33</sup> e.g. *Diss.* 2.1.21, 3.5.7, 3.15.12, 4.1.27–8; *Ench.* 29, ἀκώλυτος also often occurs together with ἐφ' ἡμῖν.

<sup>34</sup> Cf. the essay on freedom; consider also 'And because of this, if he holds that that which is good for him and beneficial is only in those things that are free from hindrance and depend on him, he will be free (ἐλεύθερος), serene, happy. . . .' (*Diss.* 4.7.9). Cf. also Sen., *Vit. beat.* XV 7.

responsibility, common persons are no less accountable for their actions than the free sage, and Epictetus' restriction of that which depends on us does not diminish our moral responsibility. Thus, as in the case of the early Stoics, there is no direct connection between the concept of freedom (ἐλευθερία) and that of moral responsibility.<sup>35</sup>

### 7.2.3 Is ἐλευθερία the only true freedom?

It can now be seen that a prevalent interpretation of Stoic theory of freedom is quite unfounded. This is the interpretation that for the Stoics ἐλευθερία was to fulfil the role of a substitute for 'the real freedom of the will' (that which depends on us, interpreted as free will or freedom of decision), which, alas, was destroyed by Stoic determinism.<sup>36</sup> This assumption is often made in connection with the idea that free will was a mere illusion (the concept of free will a mere epistemic concept) in Stoicism and was regarded as such by the Stoics. It is then assumed that the Stoics intended to make up for this lack of freedom with their concept of ἐλευθερία, the freedom reserved for the wise only, which is then referred to as 'the only freedom left for a man', and as 'the only true freedom'.<sup>37</sup> Thus the two concepts of that which depends on us and freedom are taken to have played roles in the discussion of a *single philosophical problem*, and moreover, they are often not properly distinguished.<sup>38</sup>

This treatment of Stoic freedom and what depends on us ignores some essential points: First, there is no evidence that the topics of freedom and of that which depends on us were connected in Stoic philosophy in any way before Epictetus. When Stoic sources talk about 'true freedom (ἐλευθερία)' in the context of the freedom of the wise (e.g. Stob. *Ecl.* II 101.15–20), the contrast is not with some 'illusory freedom of the will' i.e. 'that which depends on us'. The contrast is with the 'illusory freedom (ἐλευθερία)' of the non-wise free-man, who thinks of himself as free, but is in fact a slave, viz. a slave of his passions and wrong desires (7.2.1). Second, there is no reason to believe that *the early Stoics* thought their

<sup>35</sup> This does of course not preclude the notion that our beliefs about what we are morally responsible for can be pertinent to our progress towards freedom in various ways. For instance, as long as I believe that I bear moral responsibility for the disastrous consequences of an earthquake, since I did not succeed in preventing it from happening, the accompanying emotional distress I feel about my assumed moral failure will, presumably, be detrimental to my progress towards freedom.

<sup>36</sup> So Long, 1971, 175, 189 ff.; Long/Sedley 1987, i. 394; Inwood 1985, 109–11. Similarly Pohlenz 1959, i. 106; Forschner 1981, 110–11.

<sup>37</sup> Inwood 1985, 110, Long/Sedley 1987, i. 394.

<sup>38</sup> Long 1971, 189–90; Inwood 1985, 109–10. This mix-up prompts Long to wonder why 'this (Stoic) concept of freedom (i.e. ἐλευθερία) was not attacked by critics of Stoic determinism' (ibid. 175).



concept of that which depends on us to be in any way deficient, or to be founded on an illusion. Rather, it seems that they (and the other Hellenistic philosophers) did not have a concept of (indeterminist) freedom to do otherwise or of freedom of decision. Third, there is no parallel in Hellenistic times to the English ambiguity of 'freedom', as freedom of decision and freedom from hindrances and political freedom; there was no *one* word in early Hellenistic philosophy that covered these various meanings. Fourth, and most importantly, the debate over fatalism, determinism, and that which depends on us assigned the concept of that which depends on us a special function: namely to guarantee the possibility of moral responsibility, of purposeful action, of a legal system, etc. The concept of that which depends on us was considered an important necessary condition for these. The early Stoic concept of freedom, with its restriction to wise people, and being in the first instance 'freedom from' and not connected with the origination of intention and action, obviously could not and never was meant to fulfil this function.<sup>39</sup> Hence, not only is there no evidence that any Stoic thought of ἐλευθερία as an ersatz for the 'lost' freedom of that which depends on us in the debate of determinism; we should find it surprising if any Stoic had suggested this. For they would have suggested using a completely different concept, fulfilling a different function, in a different part of Stoic philosophy, and referred to by a different term, in order to make up for the lack of things depending on us. Obviously, such a suggestion would have been quite without point or philosophical motivation.<sup>40</sup>

#### 7.2.4\* *Freedom (ἐλευθερία) and that which depends on us in later antiquity*

A closer connection between the expressions ἐλεύθερος and τὸ ἐφ' ἡμῶν can, however, be found in Greek texts shortly after Epictetus, and is thus not altogether far-fetched. Perhaps the earliest surviving evidence comes from the Christian apologist Justin Martyr (c.AD 100–65). He is strongly influenced by Stoic thought of his time, an admirer of Stoic ethics (*Apol.* II 8 46b), but sternly opposed to Stoic determinism (*Apol.* II 7 45c–d). In his works we find what we missed in Epictetus, namely the introduction of ἐλεύθερος into the discussion of the compatibility of the Fate Principle with that which depends on us (*Apol.* I 43 80d). In the context of his arguing against this compatibility, he claims that human beings and angels

<sup>39</sup> One may remember that it was in particular bad actions and errors for which responsibility had to be secured; see Gell. *NA* 7.2.4–14.

<sup>40</sup> This is not to deny that *later* philosophers have tried, in various ways, to substitute concepts of freedom similar to Stoic ἐλευθερία for concepts of 'undetermined freedom of decision'.

have a power (δύναμις)<sup>41</sup> of free choice (ἐλευθέρα προαίρεσις,<sup>42</sup> *Apol.* I 43 80e). This power may echo Epictetus' προαίρεσις or προαιρετική δύναμις (*Diss.* 2.23.9–28); however, it is now regularly adorned with the attribute 'free' (ἐλεύθερος). The power (δύναμις) is clearly understood as a two-sided capacity. Whether Justin thought of it as undetermined, un-predetermined, or merely free from external force (see 6.3.5), is hard to make out from the texts. In Alexander of Aphrodisias, and generally from the end of the second century onwards we repeatedly find the locutions τὸ ἐφ' ἡμῶν ('that which depends on us') and ἐλεύθερος ('free') closely related: in particular the adjectival expression ἐλεύθερος is predicated of τὸ ἐφ' ἡμῶν. Thus Alexander writes 'that which depends on us is free and under one's own authority',<sup>43</sup> and Nemesius states 'that which depends on us must be free'.<sup>44</sup> (For both authors that which depends on us presupposes a two-sided capacity of the agent, see 8.7.)

In all these passages ἐλεύθερος no longer has anything to do with the early Stoic or the Epictetan technical philosophical sense of the word (see 7.2.1, 7.2.2). It is a freedom in which *all* human beings share, not only the wise.<sup>45</sup> This means that despite this later close link between the expressions ἐλεύθερος and ἐφ' ἡμῶν there is even in later ancient philosophy no evidence that the *Stoic* concept of ἐλευθερία played a role in the debate about the compatibility of fate and the kind of freedom that is required for moral responsibility.

### 7.3 CLEANTHES, EPICTETUS, THE DOG, AND THE CART

There are two short Stoic testimonies that have been connected in various ways with Chrysippus' or early Stoic fate theory and compatibilism. These are first, five verses from a hymn of Cleanthes, which Seneca cites in Latin, and of which Epictetus in several places reports the first or the first few lines; and second, a simile that compares human beings determined by fate to dogs tied to carts, which is reported by Hippolytus (*Haer.* 1.21.2). The similarity between these two texts has been generally noticed. I suggest and argue in this section that these texts have been notoriously

<sup>41</sup> Cf. also *Apol.* II 7 46a.

<sup>42</sup> In a parallel passage Justin's pupil, Tatian, talks about the ἐλευθερία τῆς προαιρέσεως (*Orat. ad Graec.* 7 146c).

<sup>43</sup> *Alex. Fat.* 189.10, εἶναι τὸ ἐφ' ἡμῶν ἐλευθρόν τε καὶ αὐτεξούσιον, cf. *Fat.* 188.21, τὸ ἐλευθρόν τε καὶ αὐτεξούσιον, in the context of τὸ ἐφ' ἡμῶν.

<sup>44</sup> *Nem. Nat. hom.* 105.24 ἐλευθρον γὰρ εἶναι δεῖ τὸ ἐφ' ἡμῶν, cf. 36.26–37.1 ἐλευθρον γὰρ τι καὶ αὐτεξούσιον τὸ λογικόν. Ἐλεύθερος in this use occurs also in Plot. *Enn.* VI 8.4–6.

<sup>45</sup> Tatian also preserves the link between freedom and virtue and slavery and sin: δοῦλοι γεγόναμεν οἱ ἐλεύθεροι, διὰ τὴν ἁμαρτίαν ἐπράθημεν (*Orat. ad Graec.* 11 150d).

overestimated in their value as testimonies for early Stoic determinism or compatibilism, and that Hippolytus' simile in fact belongs in the tradition of Epictetus and the Roman Stoa. This is the main reason why this section is placed together with Epictetus in this chapter, although it has perhaps more the status of an appendix. The section starts with a consideration of Cleanthes' famous lines (7.3.1) and their interpretation by Epictetus (7.3.2), which is followed by a discussion of the dog-cart simile (7.3.3).

### 7.3.1 *Cleanthes on Destiny*

The verses from Cleanthes run:

- (1) Lead me, o Zeus, and you, Destiny,
- (2) to the place you have assigned to me,
- (3) For I shall follow without hesitating. And if I do not want <to follow>,
- (4) having become bad, I will follow none the less. (Epict., *Ench.* 53.1)<sup>46</sup>
- (5) The Fates lead the willing, and pull the unwilling. (Sen. *Epist.* 107.10)<sup>47</sup>

It is important to distinguish between what Cleanthes may have had in mind when he composed the hymn and the use Epictetus (and Seneca) put it to some three hundred years later. We do not have sufficient information to establish what Cleanthes had in mind. To begin with, we lack the context of the verses in the hymn or poem—if indeed there was any context.<sup>48</sup>

- <sup>46</sup> (1) ἄγουν δέ μ' ὦ Ζεῦ, καὶ σύ γ' ἡ Περρωμένη,
- (2) ὅποι ποθ' ὑμῶν εἰμὶ διατεταγμένος·
- (3) ὡς εἴδομαι γ' ἄοκνος· ἦν δέ [γε] μὴ θέλω,
- (4) κακὸς γενόμενος, οὐδὲν ἤπτον εἴδομαι.

The first verse occurs also in *Diss.* 2.23.42, 3.22.95; 4.4.34 (here expressly attributed to Cleanthes); the first and second verses also in 4.1.131. The report may be a slightly modified version of Cleanthes' original lines. For comparison, e.g. the statements of Plato quoted in *Ench.* 53.3 and 4 differ notably from the original, although it may of course be harder to modify verse than prose. The verses are also quoted in Vettius Valens (astrologer, 2nd cent. AD) 271.32 and 261.24.

- <sup>47</sup> (5) ducunt volentem fata\*, nolentem trahunt.

\* *fata*: if the plural was in the Greek, *fata* should translate *Μοίραι* rather than *εἰμαρμένη*, and thus stem from the area of common belief rather than the context of philosophical fate theory.

This fifth verse occurs only in Sen. *Epist.* 107.10 and could be Seneca's own interpretative addition (cf. Dahlmann 1977). Seneca's translation of the first four lines varies quite a bit from the Greek in Epictetus so that this last line might also. Cf. also *Vita beata* 15.6 'quisquis . . . sequi', 15.7 'deo parere libertas est'. (We find a quotation of Seneca's translation in Augustine, *Civ.* V 8.)

<sup>48</sup> J. Dalfen (1971) shows that the poem forms a unified whole, and that there is no need to consider it as a fragment of a longer hymn.

Again, we know very little about Cleanthes' view on fate. It is not even handed down whether or not he thought that everything is fated. We might assume, though, that he did not make any outspoken statement against the Fate Principle. We know that, unlike Chrysippus, Cleanthes held that not everything fated is the work of providence, though what is due to providence is always fated (Calc. *Tim.* ch. 144, quoted in 1.4.1). From Cleanthes' long hymn to Zeus (Stob. *Ecl.* I 25.3–27.4, *SVF* i. 537; I shall refer to *SVF* pages and lines) we obtain some hint that the things which are not the work of providence are the bad actions of bad people (*Hymn* 122.11–13). From the hymn we can take it further to have been his view that god has designed a universal law (*Hymn* 122.20; 123.5) which is a law of reason, and that there is a discrepancy between this law and reality, in particular the reality of actual human behaviour (*Hymn* 122.18–19), i.e. the law is normative and not a 'law of nature' in the modern sense. We learn that bad people do not (always) know the law and (consequently?) do not act in accordance with it (*Hymn* 122.20–21), but that god in the end always manages to harmonize the good and the bad things in one world (*Hymn* 122.14–17).

It is impossible to tell from our sources whether Cleanthes had any deep understanding of the problem of determinism and freedom. But there are no signs that he was in any way aware of the difficulties.<sup>49</sup> The hymn is certainly full of obscurities and near-inconsistencies (as hymns tend to be) and it seems at times to mix in common beliefs and ideas about god, predetermination, etc. The five Cleanthean lines on destiny permit different readings, and I doubt that one can determine which was Cleanthes' own. There are several difficulties: Is that which has been assigned to a person (εἰμὶ διατεταγμένος, vs 2) normative, i.e. what one should do; or is it factual, i.e. what one will do? And is it general, i.e. part of the universal law or is it personal, i.e. designed and tailor-made for each individual? I would opt for factual and personal, the former with less conviction. (Is a person's 'lot' predetermined in all details—as Chrysippus clearly held—or is it determined in outline only, or perhaps confined to the main results of actions? I leave this open.)

Verses 3 to 4 (or 5) distinguish two basic alternative modes of human behaviour:<sup>50</sup> On the one hand, we may be good and undistorted, and god lets us know what is planned for us. (If one has to follow one's lot, one has to know it; there is an implicit assumption that if one is good, god will let one know what one should do or one will naturally know what one

<sup>49</sup> The fact that Cleanthes took a stand on which premiss of the Master Argument is false proves nothing; logical determinism and physical fate-determinism were not usually connected at his time (see Chs. 2, 3, and 5).

<sup>50</sup> Vss 3 and 4 seem to be modelled on Euripides, *Hecuba* 346–7, cf. Dalfen 1971, 179.

should do.)<sup>51</sup> We will then follow or obey (like the English 'to follow', *ἔψομαι* carries both meanings) without hesitation (vs 3) and willingly (as can be inferred from the contrast with the second possibility vss 3–4). On the other hand we might have turned (out) bad, and, presumably because of this, do not want to follow that which is ordained for us. (The hymn suggests a reason why we do not want to follow: we do not see and hear the relevant bits of god's universal law which tell us what we should do, *Hymn* 122.19–20.) However, we will follow or obey none the less. Here, a crucial ambiguity comes with the phrase 'I will follow none the less' (*οὐδὲν ἤττον ἔψομαι*). This might be understood as:

- I do not want (i.e. do not desire) to follow, but will (i.e. have the intention or impulse) none the less. This would introduce a conflict between irrational desire and deliberate intention in which intention 'wins'. In this case *ἔψομαι* refers to an action.

Or as:

- I do not want to (i.e. do not have the desire and/or intention) but will follow none the less (as a matter of fact and against my intention, unwillingly). In this case *ἔψομαι* cannot refer to an action (no intention or impulse, no action) but refers to something that happens to the person or that the person suffers.

There are two points in favour of the latter alternative: the fifth verse and another bit of the hymn: In the hymn we read that the whole cosmos obeys god's guidance ('this whole universe . . . obeys you, wherever you lead it, and willingly submits itself to your rule',<sup>52</sup> *Hymn* 122.3–4). As the cosmos must include any number of inanimate entities, the words 'lead' (*ἄγης*) and 'obey' (*πείθεται*) must refer to that which god ordains, and what as a matter of fact happens (which in the case of inanimate and non-rational beings is the same), with or without intention. Similarly, the phrase *fata trahunt* in verse 5, suggests unwillingness and lack of deliberate intention.<sup>53</sup> Hence I assume that Cleanthes' use of *ἔψομαι* (or *πείσομαι*) in verse 4 was to refer to mere happening.<sup>54</sup>

We can then describe the situation that Cleanthes couched in verse 4 as follows: the praying person—say, Cleanthes—asks god, who preordained his lot, for guidance as to what his destiny is (which might be part of the

<sup>51</sup> Cf. Cic. *Nat. deor.* II 13, III 16, *Div.* I 6, for Cleanthes' belief in divination; also Philo, *Prov.* II 74.

<sup>52</sup> *Σοὶ δὲ πᾶς ὅδε κόσμος . . . πείθεται, ἥ κεν ἄγης, καὶ ἐκὼν (sic!) ὑπὸ σεῖο κρατεῖται.* Cf. also Vettius Valens, who has the alternative formulation of vs 4: *κακὸς γενόμενος αὐτὸ τοῦτο πείσομαι.*

<sup>53</sup> If the fifth verse is just Seneca's interpretation of Cleanthes' four lines (cf. Dahlmann 1977), of course it only shows how Seneca understood the verse.

<sup>54</sup> But note that *Seneca* clearly takes it in the sense of the first alternative, cf. the context, *Epist.* 107.9–12.

law of nature, and revealed to good people ‘naturally’ or by divination), so that he can follow it willingly; and following it (willingly) is also what he should do (i.e. he should live in accordance with Nature). The petitioner adds that he is aware of the fact that even if he does not want to follow, that which god ordained will in fact happen none the less. A reason is given why he might not want to follow: he might be bad; willing and not willing is essentially connected with one’s moral qualities and badness makes one blind to god’s world order.<sup>55</sup>

Whether or not Cleanthes thought that it was fated whether someone wants or does not want to follow (this is the only want at issue), we do not know. But we have no signs of awareness of the Idle Argument problem, of the what’s-the-point-of-prophecy and what’s-the-point-of-prayer problems, all of which problems would follow the assumption of universal determinism (which includes wanting), and with all of which Chrysippus dealt. So, Cleanthes may well not have been aware of these difficulties.

### 7.3.2 *Epictetus on Cleanthes on Destiny*

It may be impossible to find out what Cleanthes actually had in mind, but there can be no doubt how Epictetus wanted the verses to be understood and used (and little doubt about Seneca’s interpretation). We have seen above (7.1) that Epictetus’ concept of that which depends on us is *not* a concept of free-will or of freedom to do otherwise, but of that which no one and nothing else (external to us) can force us to do or refrain from doing. We have also seen that this concept has its place within ethics, and does not describe a necessary condition for moral responsibility and thus for ethics itself. Epictetus seems have to taken it for granted that we have ‘a real choice’; at least, he does not reflect upon this in his extant works.

Accordingly, Cleanthes’ verses are used by Epictetus not in the context of the debate over fate and compatibilism, but in ethics, in the context of (Epictetan) that which depends on us and freedom (*ἐλευθερία*) (for which see above 7.2). It seems that in all five places Epictetus adduces the verse(s)<sup>56</sup> for more or less the same purpose. The passage at *Diss.* 4.4.34–5 is most instructive for his interpretation of the verses. The examples Epictetus discusses there (I will focus on only two) are all of things in one’s life which are not—fully—in one’s power, and which one is ordered to do, or kept from doing, either by some earthly authority or by external circumstances: in a certain situation, one is unable to go to Athens; in

<sup>55</sup> Since it is bad people who do not want to follow, in this case the unwillingness of the following might be another thing that is not part of providence, though possibly fated.

<sup>56</sup> Of course we have always to add the missing verses; this must have been understood by the listeners; from which can be inferred that they were quite familiar to them.

another one has been condemned to go to prison. These are the kind of things which in Epictetus correspond to that which is ordained in Cleanthes' verse 2. Evidently we are meant to take them as inevitably happening and to take ourselves as powerless to change them.

The verses are employed in order to ask god for guidance so that one can live willingly within the boundaries of the things which depend on one. God is meant to help one to accept one's lot, i.e. that one cannot go to Athens, or has to go to prison, and to help one willingly and readily to go to prison. This, then—if one is lucky—leads to Epictetan tranquillity (*ἀταραξία*), freedom (*ἐλευθερία*), etc. If, on the other hand, one does not want to go to prison, it is assumed that one will (have to) go none the less, although against one's will (cf. *trahunt* in vs 5); this will ruin the possibility of achieving Epictetan tranquillity, freedom, etc.

So, again, what we have is a contrast between two ways of living: either I willingly live within the boundaries of that which depends on me, which may lead to tranquillity; or I try to surpass those boundaries, in which case I am bound to be frustrated, not free, since some of the things that do not depend on me will none the less happen, and happen against my will.

But note the complete absence of the moral (in a narrower sense) aspect: it is not one's badness that keeps one from seeing what one should do (it seems to be assumed that usually everyone could see what they should do). The advice Epictetus gives is pragmatic—a counsel of prudence—rather than anything else.

This is connected with the fact that the destiny or lot at issue for Epictetus here is not one's personal, preordained, overall, lot, and is not connected with divination<sup>57</sup> or some vision of god's universal law, etc. Rather Epictetus restricts himself to the aggregate of unpleasant prospects of the future that come up in one's life as one goes along; things in which one finds oneself involved and which one cannot avoid. That is, he deals only with those parts of a person's overall destiny in which a change of attitude leads to a decrease in discomfort. These parts of destiny—that is especially the negative things which one cannot escape<sup>58</sup>—are quite independent of one's moral qualities.

For Epictetus in these passages the whole use of the Cleanthean verses is fully *within* ethics (or practical life-guidance); free-will of some sort seems simply to be taken for granted, though not *indeterminist* freedom,

<sup>57</sup> See *Diss.* 1.17.18–19, 2.7, and *Ench.* 32 for how Epictetus, in his characteristic, humble, arrogance, presents his rather pragmatic view on divination: divination is just one more factor in one's life on which one should not build one's plans and hopes, as it is not in the realm of one's control. Cf. the ironic putdown in *Diss.* 1.17.28–9.

<sup>58</sup> This includes present and future attitudes concerning past events, such as mourning, resentment, bitterness, etc., which are typical examples of what one should rid oneself of.

cf. 7.1.1. We are told how we should lead our lives, namely that we should willingly follow what is unavoidable; and we should use the verses in order to ask god for support, so that we succeed in that.

### 7.3.3 The dog and cart simile

The simile of the dog who is tied to the cart is found in the first book of Hippolytus' *Refutation of all Heresies* (*Haer.* 1.21.2, *DD* 571.11–16,<sup>59</sup> I will quote from *DD*).<sup>60</sup> It has been discussed in the context of early Stoic determinism and moral responsibility almost as often as the cylinder analogy,<sup>61</sup> and is often regarded as the authoritative stand of the early Stoics on that topic. The purpose of this section is to show that the passage neither presents early Stoic opinion, nor deals with compatibilism and moral responsibility, and that it hence does not deserve the pre-eminent place in discussions and collections of testimonies on this issue. The simile is introduced and analysed in 7.3.3.1, and its purpose, time of origin, and attribution are discussed in 7.3.3.2.

#### 7.3.3.1 Exposition of the simile

The passage in Hippolytus runs as follows:

(1) They maintained that everything is in accordance with fate, and they use the following illustration: (2) that when a dog is tied to a cart, (3) on the one hand, if it wants to follow, it is both pulled and follows, combining what is in its power with Necessity [i.e. fate]; (4) on the other hand, if it does not want to follow, it will be in any event necessitated. (5) And the same holds for human beings, too. (6) For even if they do not want to <follow>, they are in any event necessitated to enter into what is destined <for them>.<sup>62</sup> (*Haer.* 1.21.2, *DD* 571.11–16)

<sup>59</sup> Marcovich 1986, 87; the text 21.2 in *DD* is identical with Marcovich's.

<sup>60</sup> The generally accepted attribution of the *Refutation* to Hippolytus is not based on manuscript authority, but on inference. However, from the work itself it can be inferred that the author was a Roman Christian who wrote in Greek in the first half of the third century (cf. Mueller, forthcoming), and this is all that matters for the present section.

<sup>61</sup> Cf. e.g. Rist 1969, 137–8; Gould 1970, 150, 1974, 31; Long 1970, 1971, 192–3, 1974, 183; Stough 1978, 222; Sorabji 1980, 262; Forschner 1981, 110; Botros 1985, 290–302; Sharples 1986, 274–9; Steinmetz 1994, 612. The passage is given the place of honour, leading the section on moral responsibility, in Long/Sedley 1987, and is no. 2 in von Arnim's section on Chrysippean compatibilism.

<sup>62</sup> (1) καὶ αὐτοὶ δὲ τὸ καθ' ἐιμαρμένην εἶναι πάντα διεβεβαίωσαντο παραδείγματι χρῆσάμενοι τοιούτω· (2) ὅτι ὥσπερ ὀχήματος ἐάν ᾗ ἐξηρηγμένος κύων, (3) ἐάν μὲν βούληται ἔπεσθαι, καὶ ἔλκεται καὶ ἔπεται, ποιῶν καὶ τὸ αὐτεξούσιον μετὰ τῆς ἀνάγκης [οἶον τῆς ἐιμαρμένης]· (4) ἐάν δὲ μὴ βούληται ἔπεσθαι, πάντως ἀναγκασθήσεται· (5) τὸ αὐτὸ δῆπου καὶ ἐπὶ τῶν ἀνθρώπων· (6) καὶ μὴ βουλόμενοι γὰρ ἀκολουθεῖν ἀναγκασθῶνται πάντως εἰς τὸ πεπωμένον εἰσελθεῖν.



The context suggests that the authors of the simile ('they') are Chrysippus and Zeno (*DD* 571.8–9);<sup>63</sup> the purpose for which it is said to have been adduced is to illustrate or confirm the Fate Principle (*DD* 571.11–12).

The analogy features a dog, tied to a moving vehicle, and contrasts (once again) two alternative modes of behaviour: (3) either the dog wants to follow the cart. In that case it is both pulled and follows, combining in its action that which is 'free' (i.e. following) with that which is necessary (i.e. being pulled).<sup>64</sup> (4) or the dog does not want to follow. In that case it is fully necessitated (i.e. pulled only, which here must mean physically dragged along).

In (5) to (6) the analogy is drawn. Dogs stand for human beings, the route of the cart, including its destination, should correspond to the person's lot (alternatively, the cart alone could stand for destiny). Only the second half of the simile is expressly transferred to the human level: (6) if the person does not want to follow (their lot), they will be in any case forced into their lot. We can reconstruct the first part of the analogy with some certainty from (3): if the person wants to follow their lot, they will both be pulled, i.e. by god or their lot, and follow it, combining in their action that which is in their own power with necessity.

What is the point of this analogy? What exactly does it illustrate? From a merely theoretical perspective, it is that if something is one's lot and one revolts against it, it will just happen against one's will, which implies that to revolt against one's lot is *pointless*.<sup>65</sup> (Since only the second alternative, of not following, is drawn in the analogy, the point can hardly be to illustrate cases relevant to compatibilism, for these would be those of the first alternative, in which wanting and being 'forced' are combined.)

Yet, it seems that a further point of the analogy is made on the level of praxis: It is clearly *unpleasant* for the dog to be dragged without running,<sup>66</sup> and this is germane to the simile. The message seems to be: if you revolt against your fate, things will become more unpleasant (painful, frustrating, irritating) for you. This result implies the *practical* advice: do not revolt against your lot (which of course presupposes that you *know* what your lot is, see above 7.3.2).

<sup>63</sup> The passage about the Stoics begins as follows: *Στωικοί καὶ αὐτοὶ μὲν ἐπὶ τὸ συλλογιστικώτερον τὴν φιλοσοφίαν ᾗξῃσαν καὶ σχεδὸν ὅροις περιέλαβον ὁμόδοξοι γενόμενοι ὃ τε Χρυσίππος καὶ Ζήνων, οἱ ὑπέθεντο . . .* (*DD* 571.7–9), and after statements about god, his corporeality, and his providence (*DD* 571.9–10) the above-quoted simile follows.

<sup>64</sup> One might ask what 'pulled' means here. It cannot literally mean 'being dragged along', *qua* being moved by external force; it could refer to the fact that the cart still fully determines the overall speed and direction; or else to the fact that changes of speed and direction will end up physically pulling even the willing dog; or it may just be an irrelevance in the example.

<sup>65</sup> Cf. also Sharples 1986, 276.

<sup>66</sup> So again Sharples 1986.

If any term, it is obviously τὸ αὐτεξούσιον (what is in one's power under one's own authority) that introduces some idea of freedom into the analogy. But it is important to notice that there are no grounds in the text for supposing that αὐτεξούσιον refers to anything like 'freedom of the will' or 'free decision'. The distinction made is that between doing something willingly, i.e. not being externally forced, and suffering something against one's will, i.e. being forced from outside. Note in this context that τὸ αὐτεξούσιον is used already of the dog and not at all when the analogy is drawn on the level of human behaviour; and there is no reason to think that it is used of the dog only metaphorically. The distinction willingly/unwillingly does not seem to presuppose reason, assent, etc. That one can both will and not will (in some sense) is presupposed, but not at issue. Epictetus used αὐτεξούσιον in exactly this way.<sup>67</sup> Hence, there is no sign that the simile dealt with the problems of moral responsibility and compatibilism in the way Chrysippus and his opponents did elsewhere.

What was the purpose of the analogy? It is introduced in the passage as a confirmation or illustration of the Fate Principle (see above). As a matter of fact, it neither makes any point in favour of universal fate-determinism, nor does it illustrate it. (It leaves unclear whether the willing / not willing is fated; it leaves equally unclear whether only the courses of human lives are fated or all other things as well.) The point cannot be that if something is fated, it will happen—that is too trivial; nor can it be that people's lots are predetermined—that seems presupposed in the analogy.<sup>68</sup>

But, as we have seen, it also does not illustrate the—early—Stoic view on compatibilism, i.e. a solution to the question how one can at the same time be morally responsible for one's actions *and* be predetermined in what one does. Responsibility certainly is not at issue at all; goodness and badness, the fixing point for responsibility in early Stoicism (and Hellenistic philosophy in general) does not come in. It is extremely unlikely that the general point is that certain human activities both depend on us and are fated. For the point at issue is not the alternative in which wanting and being forced come together, but the case in which someone is unwilling to do something but is forced none the less. (After all, this is the half of the analogy that is drawn.) If the simile illustrated the Stoic Fate Principle or early Stoic compatibilism, it would be the first alternative of the simile that is pertinent. As it stands, the point of the analogy is that even

<sup>67</sup> Only in later non-Stoic authors does the term take on the meaning of freedom of decision (see 8.2).

<sup>68</sup> Botros (1985, 291) does not question that Hippolytus' statement that the simile illustrates the Fate Principle adequately represents early Stoics. She hence faces extreme difficulties in bending the analogy into such a shape that it could be concerned with the Fate Principle. (She is unsuccessful, although she comes up with a philosophically interesting theory.)

if you do not want it your destiny will be realized. It is the pointlessness of certain kinds of action and the unpleasantness of their result that seem advocated, presumably connected with the—implicit—advice against performing them.<sup>69</sup> Note that this point is diametrically opposed to the point Chrysippus made in his reply to the Idle Argument (cf. 5.2 and 5.3).

To sum up, to all appearance the dog and cart simile illustrated or confirmed neither the universal Fate Principle (which is what the passage announced) nor any kind of compatibilism. Rather it seems to be a moral tale concerning human behaviour, and to belong to ethics in the wider sense: it—indirectly—advises one not to rebel against one's lot.

### 7.3.3.2\* *The authorship of the simile*

Having established this, I now turn to my second point, that this simile was in fact used neither by Zeno nor by Chrysippus (nor any other early Stoic) but goes back to the 'Roman Stoa', in particular Epictetus, and is most probably an illustration or interpretation of Cleanthes' verses from that time; and that it was inserted in the outline of Stoic physics by Hippolytus' source—either by his immediate source, or at some point earlier in the tradition of the doxographical abstract from Stoic physics which we find in *Haer.* 1.21. First the points that are internal to the text of Hippolytus:

- The wider context of the passage is an outline, in doxographical manner, of the doctrines of the main philosophical schools, but designed to show that all heretical doctrines go back to some of these.<sup>70</sup> Section 21.1–5, which fills approximately half a page of text in Diels's *Doxographi Graeci*, is attributed as a whole to Zeno and Chrysippus; the form of presentation is in short sentences, containing some of the main principles of Stoic physics (in reverse order). In this context, the dog-cart simile clearly sticks out, since for no other principle is any illustration or argument, etc. given. Furthermore, it has recently been argued convincingly<sup>71</sup> that the immediately following passage 21.3–5 does not square with early Stoic philosophy, but contains later Stoic and Christian elements.
- The analogy has no parallel to or link with anything we know from Zeno on fate, and it contradicts Chrysippus' doctrine of fate—as we know it from elsewhere—in two respects: first, for Chrysippus, if someone 'willingly' did something it would not be necessary, but only fated

<sup>69</sup> A similar point is made by Long 1971, 192.

<sup>70</sup> 18 Socrates, 19 Plato, 20 Aristotle, 21 Stoics, 22 Epicurus, 23 Academics, Pyrrho, 24 Brahmins, etc.

<sup>71</sup> Mansfeld 1983, 218–22.

(6.3.2, 6.3.7). Second, in his reply to the Idle Argument Chrysippus makes the point that even if everything is fated, action is *not* pointless. His emphasis is on the fact that our actions are often necessary conditions for something that is fated to happen, and that fate-determinism should not lead to an increase of inactivity (5.3). More generally, resigning oneself to one's fate is otherwise not part of Chrysippus' fate theory and seems to go counter to its spirit.

- The fact that Hippolytus names Zeno and Chrysippus is no conclusive reason for assuming that the analogy was brought forward by those two philosophers, or by either of them. Zeno and Chrysippus are mentioned (as is often done) as the authorities for orthodox Stoic doctrine. The statement that they share the same view (*ὁμόδοξοι*, *DD* 571.8) shows Hippolytus' attempt to give a general, or *the*, Stoic theory. Furthermore, the passage ends—as it begins—with a reference to the Stoics in general, not to Zeno and Chrysippus: 'this is what the Stoics say'.<sup>72</sup> This finds further confirmation in the fact that if one has a look at Hippolytus' report on Plato for comparison (*Haer.* 1.19), what we are sold as Plato's theory there is predominantly 'Middle Platonist'. Moreover, the remarks on fate are placed in ethics, instead of physics where they usually belong in 'Middle Platonism'—as, the other way around, the dog simile belongs to ethics, but is placed in physics.
- The use of *ἀντεξούσιον* in the simile is not early Stoic but later Stoic. One of the earliest occurrences of *ἀντεξούσιον* seems to be in Epictetus (five times; e.g. *Diss.* 4.1.56; 4.1.62). The meaning there is not 'freedom of the will' or 'freedom of decision', but 'not being externally forced' and 'in one's own control', etc., just like the meaning of 'that which depends on us' for Epictetus (see above 7.1). Only later does the meaning change, becoming synonymous to *τὸ ἐφ' ἡμῶν* and occurring regularly in the debate over determinism and freedom to choose otherwise.<sup>73</sup> But, as we have seen above, in the simile in Hipp. *Haer.* 1.21.2 the word *ἀντεξούσιον* seems to be used in the Epictetan sense.<sup>74</sup>

<sup>72</sup> *Ταῦτα καὶ οἱ Στωικοί*, *DD* 571.25.

<sup>73</sup> The term *ἀντεξούσιος* becomes quite common in the 3rd cent. AD, and in Nemesius' time it seems to have taken over from *τὸ ἐφ' ἡμῶν*, cf. *Nem. Nat. hom.* 112.7: *περὶ τοῦ ἐφ' ἡμῶν, ὃ ἐστὶ περὶ τοῦ ἀντεξουσίου*. *Αντεξούσιος* occurs in Justin (*Apol.* I 43) and Tatian (*Orat. ad Graec.* 7) and in most Greek church fathers (cf. entry in *Patr. Gr. Lex.*); we find it several times in Alex. (*Fat.* 188.21, 189.10, 196.10), in Bardesanes (in Eus. *Praep. ev.* 6.10.13, 6.10.35, 6.10.41), in Origen (*Princ.* III 1.5); Eusebius (*Praep. ev.* 6.9.32) and Tertullian (*An.* 21.6) treat it as a technical term.

<sup>74</sup> On the other hand, *ἀντεξούσιον* also occurs four times in Hippolytus where he speaks *in propria persona* (*Haer.* 10.33.9 (twice), 33.10, 33.15). Here it is used in a later sense, as we find it e.g. in Alexander (cf. previous note), and as something that belongs exclusively to human beings.

- The similarity of the passage to the verses of Cleanthes (7.3.1) is striking:
  - We have the expression 'what is destined' (πεπρωμένον) i.e. the same term as in Cleanthes (though in the neuter singular), which is rather rare in early prose and does not usually occur in the discussion of determinism, and is handed down for Chrysippus only in the context of etymological remarks;<sup>75</sup>
  - we have 'Necessity' (ἀνάγκη), undistinguished from fate, as is common in the second century AD (see 8.1);
  - the two alternatives of wanting to follow versus not wanting to follow are parallel;
  - and finally the use of the contrast between ἐπεσθαι (ἐπιβομαι) and ἔλκεσθαι (*trahunt*) are also common to both texts.

It seems hence likely that the simile served as an illustration or explanation of Cleanthes' verses—or of whatever *they* were used to illustrate. But note that the simile fits Epictetus' *interpretation* of Cleanthes' verses much better than Cleanthes' verses themselves: All the points Epictetus makes when quoting Cleanthes are there; none of those that Epictetus neglects are there:

- there is no mention of moral badness, related to not wanting (as is essential for Cleanthes and early Stoics, see above);
- the use of the term αὐτεξούσιον perfectly fits Epictetus' use of it;
- the analogy, like the verses, presupposes that human beings know their lot. Together with the *advisory* element in the simile (and the absence of reference to bad people) this squares much better with Epictetus' situations of going-to-prison and not-going-to-Athens than with Cleanthes' 'universal law' (of god, reason, or nature), or divination.

So, the simile seems to fit perfectly as an interpretation of Cleanthes' verses, along the lines of Epictetus and the Roman Stoa. This result gains some confirmation, if one asks where Hippolytus might have taken the simile from.

We know Cleanthes' verses only from Seneca and Epictetus. And while in the first century they may have been part of general Stoic education, there are no signs that any Cleanthean writings or early Stoic comments on them or on that subject were still around in the late second or early third century.<sup>76</sup> Epictetus, on the other hand, was very well known and read

<sup>75</sup> The phrase 'i.e. fate' (οἶον τῆς εἰμαμένης) after 'necessity' in (3) does not quite fit the context and has hence been secluded by Roeper (1870), followed by Diels and Marcovich. However, I assume that Hippolytus (or whoever added the simile to the physics outline) felt he had to add οἶον τῆς εἰμαμένης to make the connection with the context (i.e. with the announcement that the simile corroborates the Fate Principle); the seclusion of the phrase seems thus unnecessary.

<sup>76</sup> Augustine, who quotes the Cleanthean verses in Seneca's translation, assumes that they are 'from Seneca', without any mention of Cleanthes, *Civ.* V 8. The 2nd-cent. astrologer Vettius Valens, quoting the verses in Greek, attributes them to Euripides (261.24).

by almost everyone of intellectual fame in the second / third century, especially people in Rome, and including Christians.<sup>77</sup> The author of the *Refutation of all Heresies* was Christian and a presbyter in Rome. He died in 235. His philosophical sources as far as they can be made out stem from later antiquity.<sup>78</sup> We can be reasonably sure that Hippolytus did not draw the Stoic passage *Haer.* 1.21 from any early Stoics directly.<sup>79</sup> Hippolytus' immediate source should have been some handbooks or compilations. It is idle to speculate what source he copied from, and how the dog and cart example made its way into that source. But from what I said above, we can venture a conjecture about who introduced the simile: Epictetus is certainly a good guess, given that half of his *Dissertations* are lost. If he was not its author, the simile could have originated from some other, perhaps Roman Stoic, interpretation of the verses from Cleanthes, most probably from the first or second century.<sup>80</sup>

Overall there is thus no reason to assume that the dog-cart analogy is early Stoic, that it is Chrysippean, or that it was used in the early (or any) Stoic debate on fate and responsibility. One would certainly be mistaken if one took it as the basis of one's interpretation of Chrysippus' compatibilism.<sup>81</sup>

<sup>77</sup> e.g. Dio Chrysostom, 1st/2nd cent. AD; Philostratus, Lucian, Celsus, Marcus Aurelius, Gellius, Galen (who wrote a whole treatise on Epictetus); and among Christian writers: Origen (3rd cent.), Gregory of Nazianzus (4th cent.), Augustine (4th–5th cents.). In the 6th cent. Simplicius wrote a commentary on the *Encheiridion*.

<sup>78</sup> e.g. [Apuleius], Sextus Empiricus, cf. Marcovich's introduction.

<sup>79</sup> See again Mansfeld 1983, 218–22.

<sup>80</sup> Cf. Marcus Aurelius, 10.28; and also the related image in Maximus of Tyre, 5.5.

<sup>81</sup> Thus, it does not really matter whether the simile squares with Chrysippus' theory of fate and compatibilism. One can try to make it compatible with Chrysippus: disregarding the other difficulties mentioned above, one would only have to add that it is fated as well whether or not one wants to follow one's lot, namely in that it is determined by one's (moral) character (6.3.3–5).

## A Later Stoic Theory of Compatibilism

In Epictetus' works we found no awareness of the problem of compatibilism. But Chrysippus' defence of his causal determinism and its compatibility with the things that depend on us was of course not the end of the debate. Academics, Epicureans, 'Middle Platonists', and Peripatetics equally attacked his compatibilism—as we have seen. It was up to Stoics after Chrysippus to defend his fate theory against these new objections; and up until the beginning of the third century they did so. They constructed new, more complex, and more sophisticated arguments, they developed the theory further, and some later Stoics seem to have modified parts of it. We know that the Stoics Boethus, Posidonius, and Philopator wrote books on fate; and, we can assume, so did some other Stoics whom we do not know about. Antipater composed more than one book on the Master Argument (Epict. *Diss.* 2.19). Seneca dealt with fate in his *Natural Questions* (*Nat. quaest.* II 34.3–38.4). Epictetus' favourite subjects were the things that depend on us and freedom (see 7.1 and 7.2). Some later Stoics fell for astrology and incorporated it in their fate theories—Posidonius being one of them.<sup>1</sup> Others, if we are to believe Galen, went so far as to posit certain uncaused motions in the soul in order to explain human emotions (Galen, *PHP* 4.5.1).

However, of all the discussions over the centuries very little has come down to us. We know that in the second century AD Stoic determinism was part of the general knowledge and discussion of the intellectuals of the day,<sup>2</sup> and Chrysippus' examples and quotations from Homer and Euripides had made their way into the general literature on fate.<sup>3</sup> But although in the first three centuries AD there were several Stoic theories of fate in circulation, only one systematic exposition of a later Stoic compatibilist theory has survived. This is the theory which Alexander of Aphrodisias presents and criticizes in his *On Fate*, and of which there is a parallel passage in Nemesius. These are the *only* sources that provide passages with a Stoic account of the concept of that which depends on us and its relation to

<sup>1</sup> Cf. Theiler 1946, 52–5.

<sup>2</sup> e.g. Lucian, *ŶConf.*, *ŶTr* 32, Maximus of Tyre, 13.4, Gell. *NA* 7.2, Oenomaus in Eus. *Praep. ev.* 6.6, Justin, *Apol.* 2.7; cf. also Tacitus, *Ann.* 6.22.

<sup>3</sup> Cf. e.g. Alcinous, *Didasc.* 26, Maximus of Tyre, 13.5, Oenomaus in Eus. *Praep. ev.* 6.6.22–7; [Plut.] *Fat.* 570b takes over some of Chrysippus' etymological exegesis.

Stoic fate theory. The present chapter is devoted in the main to this theory and its reception by opponents in later antiquity.

This theory, as will be shown, goes back to a particular second century AD Stoic view which, although 'orthodox', differs noticeably from Chrysippus'. The reason for the modifications can be found in the confrontation with the newly developed Middle Platonist and Peripatetic theories of fate and freedom, and the shift of emphasis to the predetermination of 'mental events' as opposed to actions only, which forced the discussion of Stoic-type determinism and that which depends on us to a different level. It is in the context of the confrontation of these theories with the Stoic ones, that problems similar to modern problems of free will and determinism arise, and both the Stoics and their opponents introduce new arguments designed to cope with the new state of the debate.

In this chapter I give an introduction to the situation of the sources in 8.1, and present and reconstruct in outline this Stoic theory in 8.2–8.4, before I examine the arguments for compatibilism in 8.5 and 8.6, and the debate over determinism and free-will in which the later Stoics are involved in 8.7.

### 8.1\* SOME NOTES ON THE SOURCES AND THE ORIGIN OF THE THEORY

In his treatise, Alexander introduces the Peripatetic theory of fate, before he presents and criticizes the Stoic theory piecemeal. Alexander does not name his opponent(s) in his *On Fate*. This suggests that he polemicized mainly against the work of a contemporary philosopher.<sup>4</sup> The Stoic provenance of that philosopher is not in doubt. But, as some straightforward incompatibilities among the Stoic sections and the use of clearly distinct terminologies show, Alexander's treatise reports and cites from several different theories. (This does not necessarily imply that he took his Stoic material from more than one book—given the way philosophical treatises at that time tended to absorb large parts of their predecessors' theories.) For instance, there is a set of passages containing the same terminology that is used in Alexander's *Quaest.* I 4; there is a passage that deals with logical questions, which seems to be early Stoic; it may stem from Alexander's commentary on Aristotle's *De Interpretatione*; and there are a number of passages that clearly come originally from the Stoic philosopher who is

<sup>4</sup> Bob Sharples points out to me that another reason for not naming the opponent could be that, while drawing on Stoic discussions, Alexander elaborates them in the context of the Peripatetics' own school-discussions. For contemporary debates in Alexander's school see Sharples 1990, 90–2, 104–10; for general information on Alexander and his works see Sharples 1987.



responsible for the long and much discussed passage on compatibilism in ch. 13 of *On Fate*, who employs a very distinct terminology, and whose theory is the topic of this chapter. At least chapters 14, 15, 22, 33, 34, 36, 38 of Alexander's *On Fate* contain passages that come from the source of ch. 13. There are some further traces of it in Alexander's *Mant.* ch. 23. Not all Stoic passages can be attributed to one of the groups mentioned: Stoic discussion of fate was still alive and changing when Alexander wrote, and we can imagine each new generation of Stoics adding arguments and improvements to the transmitted doctrine. A large part of Alexander's report appears to be more or less literal quotation from his Stoic source or sources; in addition, we find summaries and less accurate repetitions of parts of the theories he draws from, in particular when criticizing them. Although misunderstandings and the occasional (intentional or accidental) misrepresentation of his source occur, and Alexander's approach is highly critical and polemical, the overall reliability of the text as a source for Stoic theory is high, especially so in the longer excerpts.

We find a clear parallel to the Stoic theory of compatibilism from ch. 13 of Alexander's *On Fate* in ch. 35 of Nemesius' treatise *On Human Nature* (105.6–106.13 ed. Morani). This passage is of particular importance, since it provides an attribution of the theory (see below). Nemesius was bishop of Emesa in the third to fourth centuries. He is thus clearly later than Alexander, but this does not rule out that large parts of his sources pre-date *On Fate*. The passage which is parallel to Alexander is the second in a loose compilation of five different theories on fate, which are each first presented, mostly in a few sentences, and then briefly criticized.<sup>5</sup> It is likely that Nemesius took these five theories, together with some criticism, all from one (anti-Stoic) source, although selection, abridgement, and some of the criticism may well be his own doing. (Alexander on the other hand seems to have drawn directly from one or more *Stoic* sources.) Nemesius' report of the Stoic theory itself is extremely short: it is a compressed summary of not more than seven (Teubner) lines (105.6–12). Thus we cannot expect an accurate report, since it is impossible to portray a complex theory like the one at issue adequately in a couple of sentences. Still, despite the brevity of the report itself, the passage is more helpful than it may at first appear. For we obtain valuable information in Nemesius' subsequent objections, where further bits from the criticized theory are interspersed (a method we have noticed earlier in Plutarch's polemics). These contain some additional information about the Stoic view, and some literal quotations of technical phrases and principles of this doctrine.<sup>6</sup>

<sup>5</sup> Collections of different theories of fate were already in existence at Tacitus' time, cf. *Ann.* 6.22.

<sup>6</sup> Von Arnim selected only the report itself (*SVF* ii. 991). Several of the identifying characteristics of the theory thus remain inaccessible to his readers.

Before reconstructing and discussing this Stoic theory of compatibilism in 8.2–8.5, I want to demonstrate that we have indeed here one distinct theory, which is by and large orthodox Stoic, and from which both Alexander and Nemesius draw. Given the common procedure of copying whole works and adding only a few ‘improvements’ and comments here and there, when I say ‘draw from the same theory’, I do not mean: ‘had a copy of the very same text of the very same author in front of them’ (although this is not impossible), but that there is one distinctive, innovative writer in the very near past of the texts, which is distinctively different from preceding works on the same subject, and which lies behind both reports. It is otiose to ask how many Stoic and anti-Stoic intermediate sources lie between this philosopher and our texts. When I say ‘Alexander’ this must accordingly be read as ‘Alexander or any intermediate anti-Stoic source’, and the same holds *mutatis mutandis* for Nemesius.

There is an amazing correspondence in both content and form of the theories Alexander and Nemesius report, and I will now present the passages and then list the features of agreement which are characteristic of the underlying Stoic theory. Concerning the content, I restrict myself to the bare bones, and reserve the philosophical discussion for the following sections.

Here are first the two main passages:

Alex. *Fat.* 181.13–182.20 (text and trans. Sharples)

[181] ἀναιροῦντες γὰρ τὸ ἐξουσίαν ἔχειν τὸν ἄνθρωπον τῆς αἰρέσεως τε καὶ πράξεως τῶν ἀντικειμένων λέγουσιν ἐφ’ ἡμῖν εἶναι τὸ γινόμενον [καὶ] δι’ ἡμῶν. (15) ἐπεὶ γάρ, φασίν, τῶν ὄντων τε καὶ γινομένων αἱ φύσεις ἕτεραί τε καὶ διάφοροι (οὐ γὰρ αἱ αὐταὶ τῶν ἐμψύχων τε καὶ τῶν ἀψύχων, ἀλλ’ οὐδὲ τῶν ἐμψύχων ἀπάντων αἱ αὐταὶ πάλιν· αἱ γὰρ κατ’ εἶδος τῶν ὄντων διαφοραὶ τὰς τῶν φύσεων αὐτῶν διαφορὰς δεικνύουσιν), γίνεται δὲ τὰ ὑφ’ ἐκάστου γινόμενα κατὰ τὴν οἰκείαν φύσιν, τὰ μὲν ὑπὸ λίθου κατὰ τὴν (20) λίθου, τὰ δ’ ὑπὸ πυρὸς κατὰ τὴν πυρὸς καὶ τὰ ὑπὸ ζώου κατὰ

[181] For, doing away with men’s possession of the power of choosing and doing opposites, they say that what depends on us is what comes about through us. (15) For since, they say, the natures of the things that are and come to be are various and different (for those of animate and inanimate things are not the same, nor even, again, are those of all animate things the same; for the differences in species of the things that are show the differences in their natures), and the things that are brought about by each thing come about in accordance with its proper nature—those by a stone in accordance with that of (20) a stone, those by fire in accordance with that of fire, and those by a living creature in accordance

τὴν [ὑπὸ] ζώου, οὐδὲν μὲν τῶν κατὰ τὴν οἰκείαν φύσιν ὑφ' ἐκάστου γινομένων δύνασθαι φασιν ἄλλως ἔχειν, ἀλλ' ἕκαστον τῶν γινομένων ὑπ' αὐτῶν γίνεσθαι κατηναγκασμένως, κατ' ἀνάγκην οὐ τὴν ἐκ βίας, ἀλλ' ἐκ τοῦ δὴ δύνασθαι τὸ μὴ πεφυκὸς οὕτως (ὄντων τῶν περιστάσεων τοιούτων <ὡς> (25) ἀδύνατον αὐτῷ μὴ περιστάσαι) τότε ἄλλως πως καὶ μὴ οὕτως κινήθηναι. μήτε γὰρ τὸν λίθον, εἰ ἀπὸ ὕψους ἀφεθείη τινός, δύνασθαι μὴ φέρεσθαι κάτω μηδενὸς ἐμποδίζοντος· τῷ γὰρ βαρύτητα μὲν ἔχειν αὐτὸν ἐν αὐτῷ, ταύτην δ' εἶναι <τὴν> τῆς τοιαύτης κινήσεως κατὰ φύσιν <αἰτίαν>, ὅταν καὶ τὰ ἐξῶθεν αἷτια τὰ πρὸς τὴν κατὰ φύσιν κίνησιν τῷ λίθῳ συντελοῦντα παρῇ, (30) ἐξ ἀνάγκης τὸν λίθον ὡς πέφυκεν φέρεσθαι· (πάντως δ' αὐτῷ καὶ ἐξ (182) ἀνάγκης παρεῖναι ταῦτα τὰ αἷτια, δι' ἃ κινεῖται τότε) οὐ μόνον μὴ δυνάμενον μὴ κινεῖσθαι τούτων [μὴ] παρόντων, ἀλλὰ καὶ ἐξ ἀνάγκης κινεῖσθαι τότε, καὶ γίνεσθαι τὴν τοιαύτην κίνησιν ὑπὸ τῆς εἰμαρμένης διὰ τοῦ λίθου· ὁ δ' αὐτὸς καὶ ἐπὶ τῶν ἄλλων λόγος. ὡς δὲ ἐπὶ τῶν ἀψύχων (5) ἔχει, οὕτως δὲ καὶ ἐπὶ τῶν ζώων ἔχειν φασίν. εἶναι γάρ τινα καὶ τοῖς ζώοις κίνησιν κατὰ φύσιν, ταύτην δ' εἶναι τὴν καθ' ὁρμήν· πᾶν γὰρ ζῶον ὡς ζῶον κινούμενον κινεῖσθαι <τὴν> καθ' ὁρμήν κίνησιν ὑπὸ τῆς εἰμαρμένης

with that of a living creature—nothing of the things which are brought about by each thing in accordance with its proper nature, they say, can be otherwise, but each of the things brought about by them comes about compulsorily, in accordance not with the necessity that results from force but [with that] resulting from its being impossible for that which has a nature of that sort to be moved at that time in some other way and not in this, (25) when the circumstances are such as could not possibly not have been present to it. For it is not possible for the stone, if it is released from some height, not to be carried downwards, if nothing hinders. Because it has weight in itself, and this is the natural cause of such a motion, whenever the external causes which contribute to the natural movement of the stone are also present, (30) of necessity the stone is moved in the way in which it is its nature to be moved; and certainly it is of necessity (182) that those causes are present to it on account of which it is then moved. Not only can it not fail to be moved when these [causes] are present, but it is moved then of necessity, and such movement is brought about by fate through the stone. And the same account [applies] in the case of other things, too. And as it is in the case of inanimate (5) things, so it is also, they say, in that of living creatures. For there is a certain movement that is in accordance with nature for living creatures too, and this is movement in accordance with impulse; for every living creature that moves *qua* living creature is moved in a movement according to impulse brought about by fate through the creature. These things

διὰ ζώου γινομένην. οὕτως δὲ  
τούτων ἔχόντων, καὶ γινομένων  
ὑπὸ τῆς εἰμαρμένης κινήσεών τε  
καὶ ἐνεργειῶν ἐν τῷ κόσμῳ  
τῶν (10) μὲν διὰ γῆς, ἃν οὕτω  
τύχῃ, τῶν δὲ δι' ἀέρος, τῶν δὲ  
διὰ πυρός, τῶν δὲ δι' ἄλλου  
τινός, γινομένων δέ τινων καὶ  
διὰ ζώων (τοιαῦται δὲ αἱ  
καθ' ὁρμὴν κινήσεις), τὰς διὰ  
τῶν ζώων ὑπὸ τῆς εἰμαρμένης  
γινομένας ἐπὶ τοῖς ζώοις εἶναι  
λέγουσιν, ὁμοίως δὲ ὡς πρὸς  
τὸ ἀναγκαῖον τοῖς ἄλλοις  
γινομένας ἅπασιν, τῷ δεῖν καὶ  
τούτοις ἐξ ἀνάγκης τὰ ἔξωθεν  
αἷτια παρεῖναι (15) τότε, ὥστε  
αὐτὰ τὴν ἐξ ἑαυτῶν τε καὶ  
καθ' ὁρμὴν κίνησιν ἐξ ἀνάγκης  
οὕτω πως ἐνεργεῖν ὅτι δὲ  
αὐταὶ μὲν δι' ὁρμῆς τε καὶ  
συγκαταθέσεως, ἐκείνων δὲ  
αἱ μὲν διὰ βαρύτητα γίνονται,  
αἱ δὲ διὰ θερμότητα, αἱ δὲ κατ'  
ἄλλην τινὰ <αἰτίαν>, ταύτην  
μὲν ἐπὶ τοῖς ζώοις λέγουσιν,  
οὐκ ἐπὶ δὲ ἐκείνων ἐκάστην, τὴν  
μὲν ἐπὶ τῷ λίθῳ, τὴν δὲ ἐπὶ τῷ  
πυρί. καὶ τοιαύτη μὲν (20)  
αὐτῶν ἢ περὶ τοῦ ἐφ' ἡμῶν δόξα  
ὡς δι' ὀλίγων εἰπεῖν.

being so, and fate bringing about move-  
ments and activities in the world, some  
(10) through earth, if it so happens, some  
through air, some through fire, some  
through something else, and some also  
being brought about through living  
creatures (and such are the movements  
in accordance with impulse), they say  
that those brought about by fate through  
the living creatures 'depend on' the  
living creatures—coming about in a  
similar way, as far as necessity is con-  
cerned, to all the others; because for  
these too [i.e. the living creatures] the  
external causes must of necessity be  
present (15) then, so that of necessity  
they perform the movement which is  
from themselves and in accordance with  
impulse in some such way. But because  
[the movements of living creatures]  
come about through impulse and assent,  
[the others] in some cases on account of  
weight, in others on account of heat, in  
others in accordance with some other  
cause, [for this reason] they say that  
this [movement] depends on the liv-  
ing creatures, but not that each of the  
others depends, in one case on the stone,  
in another on the fire.—And such, to  
state it briefly, is (20) their opinion  
about what depends on us.

Nem. Nat. hom. 105.6–106.13 (Morani)

[105] Οἱ δὲ λέγοντες ὅτι καὶ τὸ  
ἐφ' ἡμῶν καὶ τὸ καθ' εἰμαρμένην  
σώζεται (ἐκάστω γὰρ τῶν  
γινομένων δεδόσθαι τι καθ'  
εἰμαρμένην, ὡς τῷ ὕδατι τὸ  
ψύχειν καὶ ἐκάστω τῶν φυτῶν  
τὸ τοιόνδε καρπὸν φέρειν καὶ τῷ  
λίθῳ τὸ καταφερὲς καὶ τῷ πυρί  
τὸ ἀνωφερὲς, οὕτω καὶ τῷ ζώῳ

[105] Those who hold that both that  
which depends on us and that which  
<happens> in accordance with fate are  
preserved (for to each being some kind  
of occurrence is given by fate: as to  
water to cool, to each of the plants to  
bear such and such a kind of fruit, to the  
stone to move downwards, to fire to  
move upwards, so to living creatures

τὸ συγκατατίθεσθαι (10) καὶ ὁρμᾶν, ὅταν δὲ ταύτῃ τῇ ὁρμῇ μηδὲν ἀντιπέσῃ τῶν ἔξωθεν καὶ καθ' εἰμαρμένην, τότε τὸ περιπατεῖν τέλεον ἐφ' ἡμῶν εἶναι καὶ πάντως περιπατήσομεν)—οἱ ταῦτα λέγοντες (εἰσὶ δὲ τῶν Στωικῶν Χρύσιππος τε καὶ Φιλοπάτωρ καὶ ἄλλοι πολλοὶ καὶ λαμπροὶ) οὐδὲν ἕτερον ἀποδεικνύουσιν ἢ πάντα καθ' εἰμαρμένην γίνεσθαι· εἰ γὰρ καὶ τὰς ὁρμὰς παρὰ (15) τῆς εἰμαρμένης φασὶν ἡμῖν δεδόσθαι καὶ ταύτας ποτὲ μὲν ἀπὸ τῆς εἰμαρμένης ἐμποδιζέσθαι, ποτὲ δὲ μὴ, δηλὸν ὡς πάντα καθ' εἰμαρμένην γίνεται καὶ τὰ δοκοῦντα ἐφ' ἡμῶν εἶναι. καὶ πάλιν τοῖς αὐτοῖς λόγοις χρῆσόμεθα πρὸς αὐτοὺς δεικνύντες τῆς δόξης τὴν ἀτοπίαν. εἰ γὰρ τῶν αὐτῶν αἰτίων περιεστηκότων, ὥς φασιν αὐτοί, πᾶσα ἀνάγκη τὰ αὐτὰ (20) γίνεσθαι, καὶ οὐχ οἶόν τε ποτὲ μὲν οὕτω, ποτὲ δὲ ἄλλως γενέσθαι διὰ τὸ ἐξ αἰῶνος οὕτως ἀποκεκληρώσθαι ταῦτα, ἀνάγκη καὶ τὴν ὁρμὴν τὴν τοῦ ζώου πάντῃ καὶ πάντως τῶν αὐτῶν αἰτίων περιεστηκότων οὕτω γενέσθαι· εἰ δὲ καὶ ἡ ὁρμὴ ἐξ ἀνάγκης ἐπακολουθεῖ, ποῦ λοιπὸν τὸ ἐφ' ἡμῶν; ἐλεύθερον γὰρ εἶναι δεῖ τὸ ἐφ' ἡμῶν ἢν δ' ἂν ἐλεύθερον, εἰ τῶν αὐτῶν (106) περιεστηκότων ἐφ' ἡμῶν ἦν τὸ ποτὲ μὲν ὁρμᾶν, ποτὲ δὲ μὴ ὁρμᾶν. εἰ δὲ ἐξ ἀνάγκης ἐπακολουθεῖ καὶ τὸ ὁρμᾶν, δηλὸν ὡς καθ' εἰμαρμένην καὶ τὰ τῆς ὁρμῆς γενήσεται, εἰ καὶ ὑφ' ἡμῶν γίνεται καὶ κατὰ τὴν ἡμετέραν

<it is given> to give (10) assent and to have impulse. When nothing of the things external and according to fate resists this impulse, then walking fully depends on us and we will definitely walk) those who say these things (they are Chrysippus and Philopator and many other famous Stoics) do not prove anything else but that everything happens in accordance with fate. For if the impulses, too, are given to us by (15) fate, and they are now hindered by fate, now not, then it is clear that everything happens in accordance with fate, including those things that seem to depend on us. And again we use the same <i.e. their own> words against them, proving the absurdity of their view. For if, as they say, when the same causal circumstances are present, necessarily the same <things> (20) happen and it is not possible that they happen now this way now otherwise, because they are predetermined that way from eternity, then necessarily the impulse of the living beings, too, will happen altogether in this way. But if impulse, too, follows from necessity, where does that which depends on us remain? For that which depends on us is free. But it would be free <only> if in the same (106) circumstances it would depend on us now to have an impulse, not not to have an impulse. But if having an impulse, too, follows from necessity, it is clear that those things that happen by impulse, too, will happen in accordance with fate, if they happen by us and in accordance with our nature, i.e. <in accordance with> impulse and judgement. For if it were possible, too, that the impulse does not happen, (5) then the premiss

φύσιν καὶ ὁρμὴν καὶ κρίσιν. εἰ γὰρ οἷόν τε ἦν αὐτὴν καὶ μὴ γενέσθαι, (5) ψευδὴς ἂν ἦν ἡ πρότασις ἡ λέγουσα ὅτι τῶν αὐτῶν περιεστηκότων αἰτίων ἀνάγκη τὰ αὐτὰ ἔπessθαι. οὕτω δὲ καὶ ἐπὶ τοῖς ἀλόγοις καὶ τοῖς ἀψύχοις εὐρεθήσεται· εἰ γὰρ τὴν ὁρμὴν ἐφ' ἡμῖν τάττουσιν, ὅτι φύσει ταύτην ἔχομεν, τί κωλύει καὶ ἐπὶ τῷ πυρὶ λέγειν εἶναι τὸ καίειν, ἐπειδὴ φύσει καίει τὸ πῦρ, ὥς πον καὶ παρεμφαίνειν ἔοικεν ὁ Φιλοπάτωρ ἐν τῷ περὶ (10) εἰμαρμένης; οὐκ ἄρα τὸ δι' ἡμῶν ὑπὸ τῆς εἰμαρμένης γινόμενον ἐφ' ἡμῖν ἔστι· τῷ γὰρ αὐτῷ λόγῳ καὶ ἐπὶ λύρα καὶ αὐλοῖς καὶ τοῖς ἄλλοις ὀργάνοις καὶ πάσῃ ἀλόγοις τε καὶ ἀψύχοις ἔσται τι, ὅταν τινὲς δι' αὐτῶν ἐνεργῶσι· τοῦτο δὲ ἄτοπον.

would be false which says that when the same causal circumstances are present, necessarily the same things will follow. It will be found to be in this way also in the case of non-rational and inanimate beings. For if they classify the impulse as depending on us, since we have it by nature, what prevents one from saying that it depends on the fire to burn, since fire burns by nature, as Philopator seems somehow to suggest in his book (10) *On Fate*? Hence that which happens through us by fate is not that which depends on us. For by the same argument, something will also depend on the lyre and the flutes, and the other instruments, and all non-rational and inanimate beings, when some <people> are active through them. But this is absurd.

Nemesius introduces the holders of the theory as 'those who hold that both that which depends on us and that in accordance with fate is preserved' (105.6). ('That in accordance with fate' is short for 'that everything happens in accordance with fate'.) Alexander sums up his report as 'this is in short their view about that which depends on us'. But as a matter of fact, the topic of his passage, too, is the compatibility of that which depends on us with fate-determinism. Accordingly, in the parallel passages ch. 38 211.29 and ch. 36 208.11–12 we find the same characterization of the theory as in Nemesius.<sup>7</sup>

The Stoic author of the theory starts out with the unquestioned assumption that everything happens in accordance with fate, and sets out to show that what depends on us is preserved in his theory, by explaining what it means that certain things depend on us, and how these things fit in with

<sup>7</sup> In both passages the Fate Principle is added as a further assumption to the thesis that that which depends on us is preserved through preserving activity according to impulse so that the full goal is to preserve that which depends on us in a deterministic system. The wording in the first passage (ch. 36) is of further help as it formulates 'through preserving the activity according to impulse . . . in the (principle) that all things occur according to fate'; this formulation suggests that the notion of 'activity according to impulse' was to be determined in an already worked out deterministic theory of fate.

the causal network that is fate. Both passages, Alexander and Nemesius, are drawn from a worked-out theory of determinism and that which depends on us. Both authors present an abridged version of the reported theory, Nemesius giving little more than a compressed summary. The course of argumentation presented is convoluted. The passages abound with philosophical technicalities.

The theory encompasses the following features, presented in both texts:

- (i) It makes use of a Stoic hierarchy of kinds of natural movements, related to the Stoic *scala naturae*<sup>8</sup> (8.2). On the lower levels we have the four *elements* fire, air, water, and earth and their movements,<sup>9</sup> and as an example for *inert objects* the stone and its downward movement.<sup>10</sup> On the level of *plants* Nemesius reports that their nature is to produce certain fruits (105.8). Plants do not occur in Alexander's main report in ch. 13 but they are named in his repetition of the examples of the hierarchy in ch. 36 (*Fat.* 208.5–7). The next level is *living creatures*,<sup>11</sup> whose natural movement is activity in accordance with impulse. A subclass of living creatures are *us*, i.e. *human beings*, whose natural movements are those in accordance with impulse and assent or judgement.<sup>12</sup>
- (ii) The natural movements are determined by three factors: the nature of the object, external causes, and the absence of external hindrances (cf. 8.2).<sup>13</sup>
- (iii) All movements are necessitated (cf. 8.2).<sup>14</sup>
- (iv) All movements are governed by a particular specified principle of causation (see below and 8.2).

None of these four features is known in this way from Chrysippus' theory of compatibilism.

Even more striking than the agreement in content, is the similarity of philosophical style in the passages. The underlying theory is meticulously worked out, and clothed in a complex system of formulaic, technical, expressions. It displays a penchant for prepositional phrases, which are applied to the different levels of the hierarchy of natural movements.

<sup>8</sup> Cf. Inwood 1985, 18–27, for a discussion of the passages on the *scala naturae*.

<sup>9</sup> Nem. 105.7–8; Alex. *Fat.* 181.20, 182.10, 17, 19, 185.4.

<sup>10</sup> Alex. *Fat.* 181.18, 26 ff. *κάτω φέρεσθαι*, cf. 182.17–19, 179.16; Nem. 105.8–9 *τὸ κατωφέρειν*.

<sup>11</sup> Nem. 105.9–10; 21–2, Alex. *Fat.* 208.6 ff.; 181.20 f.; 182.5–8, etc.

<sup>12</sup> Nem. 106.3–4; Alex. *Fat.* 183.22–3.

<sup>13</sup> Nem. 105.10–11, 15–16, 18–19; Alex. *Fat.* 181.26–182.4.

<sup>14</sup> e.g. Nem. 105.19; Alex. *Fat.* 181.21–5, 181.30–182.2, 182.12–16. The occurrences of expressions of necessity are very frequent in these and related passages, and one can hardly make Alexander responsible for introducing them all, and thus distorting the Stoic theory.

There is first the formula 'διὰ  $x$  ὑπὸ τῆς εἰμαρμένης'. Cf. its various applications: ὑπὸ τῆς εἰμαρμένης διὰ ζώου (*Alex. Fat.* 182.7–8); ὑπὸ τῆς εἰμαρμένης διὰ τοῦ λίθου (*Fat.* 182.3–4) and in universal formulation ὑπὸ τῆς εἰμαρμένης καὶ διὰ τῆς οἰκείας φύσεως τῶν ὄντων ἐκάστου τῆς εἰμαρμένης (*Fat.* 183.1). From the level of living beings upwards this formula defines 'τὸ ἐπὶ  $x$  γινόμενον'; cf. τὸ δι' ἡμῶν ὑπὸ τῆς εἰμαρμένης γινόμενον ἐφ' ἡμῖν ἐστι (*Nem.* 106.10–11) and τὰς διὰ τῶν ζώων ὑπὸ τῆς εἰμαρμένης γινόμενας ἐπὶ τοῖς ζώοις εἶναι λέγουσιν (*Alex. Fat.* 182.12–13).

Second, in order to define 'τὸ διὰ  $x$  γινόμενον' from the first formula, another technical phrase is invoked: the formula here is 'ὑπὸ  $x$  κατὰ τὴν (οἰκείαν) φύσιν of  $x$ '. Cf. ὑφ' ἡμῶν γίνεται καὶ κατὰ τὴν ἡμετέραν φύσιν καὶ ὁρμὴν καὶ κρίσιν (*Nem.* 106.3–4) and γίνεται δὲ τὰ ὑφ' ἐκάστου γινόμενα κατὰ τὴν οἰκείαν φύσιν, τὰ μὲν ὑπὸ λίθου κατὰ τὴν λίθου, τὰ δ' ὑπὸ πυρὸς κατὰ τὴν πυρὸς καὶ τὰ ὑπὸ ζώου κατὰ τὴν ζώου (*Alex. Fat.* 181.18–21). καὶ ὁρμὴν καὶ κρίσιν in *Nemesius* names the οἰκεία φύσις of 'us' (the first καὶ being exegetical).

Third, the similarity in formulating the specified principle of causation is conspicuous; compare

... τῶν αὐτῶν αἰτίων περιεστηκότων ... πᾶσα ἀνάγκη τὰ αὐτὰ γίνεσθαι, καὶ οὐχ οἷόν τε ποτὲ μὲν οὕτω, ποτὲ δὲ ἄλλως γενέσθαι ... (*Nem.* 105.18–20)

... τῶν αὐτῶν περιεστώτων ὅτε μὲν οὕτως ὅτε δὲ ἄλλως ἐνεργήσει τις ... (*Alex. Fat.* 185.8–9).<sup>15</sup>

In *Alexander's* chs. 13–15 we find περιεστώτων instead of *Nemesius's* περιεστηκότων, but we find the latter expression in the same context in his ch. 22: τῶν αὐτῶν ἀπάντων περιεστηκότων ... (*Fat.* 192.22–3).

I have used these features, in particular the formulaic expressions, the principle of causation, and the specific form of the hierarchy of movements, in order to identify in *Alexander* the above-mentioned passages that reflect the same Stoic theory:<sup>16</sup> I have not been able to detect any of these formulae in any other Greek Stoic sources, and certainly in none of the texts that claim to quote from *Chrysippus*.

The extraordinary extent of parallels in both content and formulations is sufficient to establish that *Alexander* and *Nemesius* report from the same theory of compatibilism.<sup>17</sup> It remains to determine to whom we should attribute this theory. There is no controversy about the fact that it is of Stoic origin. However, opinions differ on the question of when

<sup>15</sup> Cf. also the parallels in *Fat.* 181.24–5, 192.22–4, 176.21–2, *Mant.* 174.3–9.

<sup>16</sup> i.e. parts of chapters 14, 15, 22, 33, 34, 36, 38, and of *Mant.* ch. 23.

<sup>17</sup> There are of course differences between the passages in *Nemesius* and *Alexander*. They are painstakingly listed in *Sharples* 1978, 254–5. But none of them proves any real difference in doctrine: none leads to a contradiction, and all can be explained by omissions of one or the other author.



and by whom the theory was developed, especially as to whether it is Chrysippean or later Stoic.<sup>18</sup>

As has been said above, in his *On Fate* Alexander mentions neither the philosophical school nor the name of the author of his Stoic source. Nemesius, on the other hand, attributes the doctrine to the Stoics, and more specifically, to 'Chrysippus, Philopator, and many other famous ones' (105.12–13). Thus here we find rather too many than too few candidates. At the end of his criticism of the theory Nemesius mentions Philopator again. This time he even names the writing of Philopator's he is concerned with, namely a book entitled *On Fate*. Philopator is not a well-known figure in the history of Stoic philosophy. To us he is otherwise familiar only from Galen (*Aff. dig.* 5.41 Kühn, i.e. *De cognosc. an. morb.* 7 531–2 CMG v. 4.1.1). But Galen's remark that he was himself a 'grand-pupil' of Philopator's allows one to place the latter's intellectual prime somewhere roughly between AD 80 and AD 140, assuming that Galen studied with Philopator's pupil around AD 150.

Whose theory does Nemesius then report? Since oral tradition is out of the question, the issue is from which *written* Stoic source Nemesius (or perhaps rather his anti-Stoic source) drew. For Nemesius' seven-line-summary of the Stoic doctrine a plurality of sources can be ruled out, simply because of the brevity of the report. The one source cannot have been Alexander's treatise. This is evident from the various Stoic points in Nemesius' text that we do not find in Alexander.<sup>19</sup> Looking for *one* written, Stoic, source, the best guess is Philopator's book on fate, for the following reasons: Chrysippus was much more famous than Philopator, even in the second century; so, why should anybody who reported from Chrysippus' writings name Philopator and his book? (Moreover, when we have different philosophers named but a written work of only one of them, it is more likely that the given information stems from that book—especially when it is later.) Thus we can conclude that the only plausible reason why Nemesius gave both Philopator's name and the title of his book is that he (or his anti-Stoic source) copied from this work.

It still needs explaining why Nemesius mentions Chrysippus and that host of nameless famous Stoics. But this raises no major problems: Given that Philopator was at least to a certain extent an orthodox Stoic, we should expect him to go back to the famous early Stoics as authorities

<sup>18</sup> e.g. Long 1970, 261 n. 38, refers to the Nemesius passage as: 'Cf. Chrysippus ap. Nemesium *Nat. hom.* 35'. D. Frede 1982 and Sharples 1978 assume a later, 2nd-cent. Stoic theory; Theiler 1946, 66 (78) suggests Philopator. Long 1971, 196 n. 27, and 1970, 268 n. 54, doubts that Philopator is the originator of the presented theory. (Von Arnim attributes a passage from Alex. *Fat.* to Chrysippus (*SVF* ii. 981), so do Long 1971, 183–4, M. Frede 1974, 88).

<sup>19</sup> See above. Cf. also Sharples 1978.

to enhance the status of his own doctrine. Writing on the compatibility of fate with that which depends on us, the obvious Stoic is Chrysippus. It is also possible that Philopator in his book claimed to explain Chrysippus' position, and thus passed off his innovations as elucidation of Chrysippus' theory of fate. Either way, this reference to Chrysippus was then simply taken over by Nemesius. Nemesius' mention of the 'many other famous <Stoics>' should not be taken too seriously. We may imagine Philopator writing 'and so said Chrysippus and all the other famous Stoics'; or else Nemesius added this phrase, perhaps thinking of some other Stoics mentioned in Philopator's book.

Since it has been established above that Alexander draws from the same Stoic theory as Nemesius, it follows that if Nemesius goes back to Philopator's *On Fate*, and Philopator was the innovative author of that theory, then Alexander in his *On Fate* ch. 13 and related passages, should go back to Philopator, too. And this fits well with our other evidence. Philopator's *On Fate* must have been written approximately sixty to a hundred years before Alexander composed his treatise with the same title. We know that Alexander often names Chrysippus and other earlier philosophers when presenting their doctrine, but tends to be more reticent with names of contemporaries of his. The complete absence of any Stoic name in *On Fate* then makes Chrysippus' books on fate a less likely source. On the other hand, Alexander seems to have been engaged in a philosophical dispute with his contemporary Galen,<sup>20</sup> and it is probable that he was acquainted at least in part with the same intellectual currents and philosophical discussions as the latter. Alexander then could have taken excerpts from a copy of Philopator's book directly. But given that his *On Fate* shows definite signs of at least two Stoic theories with noticeably different terminology, it is perhaps still more likely that Alexander copied from a Stoic near-contemporary of his who in turn had absorbed large parts from Philopator.

Whether Philopator was the innovative Stoic philosopher with whom the above-sketched theory originated (which is perhaps the most plausible assumption) or whether he had taken it over from some other Stoic can ultimately not be decided. But comparison of the style of writing of the theory with Chrysippus on the one hand (see e.g. Galen, *PHP*, Chrysippus, *Δογ. Ζητ.*, Diogenianus in Eus. *Praep. ev.*, Plut. *Stoic. rep.*) and second- and third-century Stoicizing philosophers on the other (e.g. reports from Clement, *Strom.*, Origen, *Orat.* and *Princ.*) show clearly more similarities to the latter—especially the many fixed, formulaic locutions and prepositional phrases. Any such fixed terminology is completely absent from what we know about Chrysippus' *On Fate*.

<sup>20</sup> For the evidence see Thillet 1984, pp. xxxii–xlix.

To preserve both this remaining uncertainty about the authorship of the theory of compatibilism, and the fact that Philopator is the most likely author, and that in any event, the theory originated in his vicinity, I shall refer to its author as 'PHILOPATOR' (i.e. in small capitals). What matters is that the theory is not early Stoic but originates from approximately the second century AD. This is further confirmed by the fact that we have no traces of this doctrine with its particular formulaic expressions in any writings before the second century AD, but find such cases in at least three works from the second century or later: There are traces in Marcus Aurelius (see 8.6); in Latin in Calcidius (*Tim.* 161), drawn presumably from a late Middle Platonist source, and in Boethius (*Int.* II 193–6, 217–18), presumably via Alexander's—lost—commentary on Aristotle's *De Interpretatione*.<sup>21</sup> Perhaps Lucian and Ptolemy were also acquainted with parts of the theory. I introduce the parallel passages as I go along.

## 8.2 PHILOPATOR'S CAUSAL DETERMINISM

PHILOPATOR's compatibilism is based on a theory of natural movements; that is, of those movements of an object that are in accordance with the proper nature (*οἰκεία φύσις*)<sup>22</sup> of that object. Three different factors are distinguished that are of relevance to any such natural movement.

The first factor is the proper nature of the object that moves. The proper natures differ for different types of objects and are responsible for the kind of movement that is characteristic for the type of object.<sup>23</sup> For example, the proper nature of a stone is its heaviness which is responsible for downward movement; the proper nature of a plant involves its bringing about a certain type of fruit, the proper nature of a living being (*ζῶον*) is its faculty of impulse which is responsible for impulse-directed movement, or 'intentional movement'.

The second factor involved in the natural movement of an object is external causes.<sup>24</sup> These are, presumably, in the case of a stone, a person or perhaps strong winds that make it fall from some height; in the case of a living being an externally induced impression (cf. Alexander *Fat.* ch. 14).

The presence of the first two factors together does not yet guarantee that the natural movement takes place. It is possible that although both

<sup>21</sup> Cf. Sharples 1978.

<sup>22</sup> This phrase is another distinctive feature of PHILOPATOR's theory.

<sup>23</sup> *Ἡ κατὰ φύσιν κίνησις*, Alex. *Fat.* 181.28 and 29; 182.6.

<sup>24</sup> Cf. Alex. *Fat.* 181.28–9: *ὅταν καὶ τὰ ἔξωθεν αἰτία (τὰ πρὸς τὴν κατὰ φύσιν κίνησιν τῷ λῶν συντελοῦντα) παρῇ . . .*; see also *Fat.* 182.14; Nemesius, e.g. 105.18–19, refers to the external circumstances as *τῶν αἰτίων περιεστηκότων*.

factors are present, some external things keep the movement from occurring. Hence it is an additional, third, requirement that no hindering circumstances must be present.<sup>25</sup> This requirement corresponds to the Stoic definiens of possibility, which includes as one conjunct 'is not hindered by external circumstances' (cf. 3.1.4, 3.1.5).

The co-operation of the three factors is best illustrated by the stone example in Alexander:

For the stone cannot not fall down (characteristic movement), when it is let go from some height (second factor), if nothing hinders (third factor); for since it has weight in itself (first factor), and this weight is the cause in accordance with nature of such a movement, whenever the external causes which contribute to the natural movement of the stone are present, too (second factor again), the stone will of necessity fall, as it is its nature.<sup>26</sup> (*Fat.* 181.26–30)

Thus some external circumstance, i.e. a change in the surroundings of the object, prompts or activates the nature of the object, which, provided hindering or counteracting circumstances are absent, will, with necessity, bring about the movement that is natural to it. This system of a co-operation of two causal factors is similar to that of Chrysippus, as reported in Cic. *Fat.* 42–3 (6.3.3). As in Chrysippus, only the circumstantial, externally prompting causes are referred to with a special expression: in Alexander they are called 'external causes' (*Fat.* 181.28–9, 182.14).<sup>27</sup>

Unknown from Chrysippus is the emphasis PHILOPATOR places on the necessity with which the movement happens, once the three factors are all present.<sup>28</sup> In place of Chrysippus' distinction between universal fate and its inevitability on the one hand and the restricted scope of necessity (connected with force) on the other, we have a distinction of two types of necessity, necessity by force and necessity of inevitability, and the latter (which corresponds to Chrysippus' Necessity (*ἀνάγκη*), see 3.4.2.) is equated with fate (cf. 8.4) and is thus universal. The difference between Chrysippus and PHILOPATOR is again, at most, one in terminology.<sup>29</sup>

<sup>25</sup> Alex. *Fat.* 182.27, Nem. 105.10–11; 15–16.

<sup>26</sup> The Greek text is quoted above in 8.1.

<sup>27</sup> The one time the internal causal factor is called a cause is an emendation, *Fat.* 181.28, if a plausible one. Equally, in *Fat.* 182.18 the insertion of *αἰτία* after *κατ' ἄλλην τινά* would improve the text (proposed by Rodier and Donini, and accepted by Sharples, see Sharples 1983, 246). *Fat.* 185.28–33 shows that Alexander, in his own theory, considers the internal factor a cause.

<sup>28</sup> e.g. *Fat.* 181.21–5; 181.30, 182.2–3, 182.14–16.

<sup>29</sup> In *Fat.* 175.5–7 Alexander uses the Stoic distinction of necessity of force and necessity of inevitability. Cf. Alex. *Quaest.* I 4 10.12–14 for a similar distinction (discussed in 3.4.2).

In the above-quoted passages from Nemesius and Alexander the only movements discussed are natural movements. But there are doubtless also non-natural movements in PHILOPATOR's physics: a stone being thrown upwards, a person pushed by someone else, will perform non-natural movements. In such cases the specific proper nature (*οἰκεία φύσις*) of the object does not bring about its specific movement, although the nature of the object could still be a causal factor in the instance of causation.

In addition to the three factors that have a part in cases of natural movements, there is one further distinctive feature of PHILOPATOR's determinism which occurs only in Nemesius and Alexander. This is another specified principle of causality (cf. 1.3.3), which I call 'PHILOPATOR's Causal Principle'. It runs:

it is impossible that, when all the same circumstances are present concerning the cause and that which is caused, at one time it should not occur in some particular way, and at another, it should. (Alex. *Fat.* 192.22–4)

If the same circumstantial causes are present, . . . necessarily the same <things> happen and it is not possible that they happen now this way now otherwise . . . (Nem. 105.18–21)<sup>30</sup>

The various formulations in which the principle is given are so similar that there can be no doubt that the wording is of Stoic origin. This principle is clearly a principle of the type 'same causes—same effects', i.e. what I called a 'specified causal principle' (1.3.3). It differs from Chrysippus' specified causal principle in that it proceeds from the same starting situation to the impossibility of different effects, whereas Chrysippus argued from a difference in effects to a difference in starting situations. On the assumption that the circumstances the principle talks about cover both the second and the third factor, and more generally, the entirety of (relevant) external circumstances in the case of any movement, we can formulate PHILOPATOR's principle as

(PCP) If two starting situations are the same in all respects, then it is impossible that two different effects ensue.

This is still rather vague, as long as we do not know what counts as *the same* starting situation. Our texts are silent on this point. As in the case of Chrysippus, there is nowhere a clue that PHILOPATOR had a plurality of empirically detectable laws of nature in mind. If we take the phrase 'the same' literally (exempting only the factors of time and space), we can say that within Stoic physics it is very unlikely that the same starting

<sup>30</sup> Cf. Alex. *Fat.* 176.21–2; 185.7–9; cf. the wording of 181.21–5, which is reminiscent of the principle, and also *Mant.* 174.2 ff. where Alexander criticizes the principle. As Sharples has noted, Plotinus in *Enn.* III 1.2.30 ff. reports a view that the preceding circumstances are necessary and sufficient conditions for what follows (Sharples 1978, 256). But this is not the principle we have in Alexander and Nemesius. Both terminology and content differ.

situation concerning a cause and its circumstances will ever occur twice, except perhaps in the next world-cycle—which is not empirically accessible. PHILOPATOR's causal principle seems to be based rather on 'thought-experiment' than on any empirical likelihood.

For the principle to establish complete determination of all changes (in the way Chrysippus' SCP did, cf. 1.3.3), what is required is the transition from the *two* starting situations that are the same in all relevant respects, to *one* starting situation, in which it is inevitable that the effect that ensues ensues.<sup>31</sup> Such a step is difficult to verbalize without recourse to laws of nature formulated in terms of *types* of things and events, such as 'whenever there is a starting situation *s* of type *S*, an effect *e* of type *E* will ensue'. Perhaps PHILOPATOR, like Chrysippus, thought in terms of counterfactuals, and had in mind something like this:

(PCP') There is no possible starting situation *s<sub>i</sub>* (including a cause *c<sub>i</sub>*) that is in every respect qualitatively identical with the actual starting situation *s* (including the cause *c*), and in which an effect *e<sub>i</sub>* ensues that differs qualitatively in any way from the actual effect *e*.

In whichever form PHILOPATOR would have elucidated his principle, it is remarkable for the history of determinism for various reasons:

- It aims to establish complete determination of all motions.
- It aims to rule out any ambiguity which would allow one to interpret the system as partly undetermined (e.g. concerning the question as to whether general items or particulars are at issue). The point that all particulars, however insignificant, are included is also made explicitly in Alex. *Fat.* 175.7–13.
- The principle is not set out in terms of comparable, empirical situations,<sup>32</sup> and does not involve the idea of particular empirically detectable laws of nature. Rather, the principle seems to be set out in terms of counterfactual situations. It is *assumed* that in any imagined starting situation that is qualitatively identical in all relevant aspects with some actual starting situation, the same effect would have to follow as it does in that actual situation. Nothing is said about the possibility of finding types of relevantly similar situations which lead to the same effects. The idea seems to be that if in imagined qualitatively identical situations necessarily the same thing happens, then in any one actual situation it is inevitable that the thing that happens, and not something else, happens.

<sup>31</sup> Such a step is implied in Alex. *Fat.* 185.7–10, a passage that may give the Stoic view: 'relying on the assertion that if in the same circumstances someone acts now in this way, now in that, uncaused motion is introduced, and to say that because of this someone will not be able to do the opposite of what he does . . .'

<sup>32</sup> Despite their temporal origin, the conjunctive phrases ὅτε μὲν . . . ὅτε δὲ . . . and ποτὲ μὲν . . . ποτὲ δὲ . . . need mean no more than 'in the one case . . . in the other . . .'—just like the English 'now . . . now . . .'.

This may presuppose that all events are governed by laws of nature, but these laws of nature could be laws that govern whole world states and are of indefinite complexity.

It is PHILOPATOR's Causal Principle that is most often adduced when the Stoics are put forward as the forefathers of modern theories of determinism.<sup>33</sup> Comparison is made with 'Laplacean determinism',<sup>34</sup> and some modern accounts of causal determinism do indeed resemble the Stoic principle.

However, it is important to see that PHILOPATOR's Causal Principle does not *define* Stoic causal determinism. Rather, it is introduced to *back up* the Stoic Fate Principle, or the General Causal Principle that nothing happens without cause. So the statement of the principle in Alex. *Fat.* 192.22–4 (quoted above) is followed by the remark: 'For if things happened in this way <i.e. that different effects are possible with the same circumstances and causes> there would be uncaused motion.'<sup>35</sup> And uncaused motion would lead to the explosion of the universe (Alex. *Fat.* 192.11–13). The principle serves to preclude uncaused motion, but it does not itself specify the concept of cause involved. The Stoics maintain that a cause is corporeal and is marked out—and distinguished from mere circumstances—by its active contribution to the effect (see 1.1.2 and 1.3). PHILOPATOR's Causal Principle, if read with a concept of event-causation (based on universal factual regularity between events) would *underdetermine* Stoic causal determinism insofar as it would not require that there is a cause, or are causes, that are *actively* responsible for the effect. For the Stoics, factual regularity is not sufficient to account for causality. 'Cause' in PHILOPATOR's Causal Principle has to be read as 'cause' in the Stoic sense. And then it becomes quite clear that the principle is essentially distinct from modern accounts of causal determinism.

This difference also affects the issue of causal laws or 'laws of nature'. The Stoics are often assumed to have grounded their determinism on the idea of an all-encompassing set of 'laws of nature', similar to some modern theories of determinism, and that such a conception lies behind PHILOPATOR's principle. The assumption of such laws is an essential feature of those theories of determinism that are based on universal regularity. However, as we have seen earlier (4.2), what comes closest to modern laws of nature in early Stoic philosophy, the *theorems* (θεωρήματα), are precisely not causal laws, but superimposed regularities. Furthermore, as I said above, we have no signs that PHILOPATOR developed a concept of empirical laws of nature.

<sup>33</sup> e.g. Sambursky 1959, 54; Forschner 1981, 99; D. Frede 1990, 220–1.

<sup>34</sup> Sambursky 1959, 54.

<sup>35</sup> Ἐσεσθαι γάρ, εἰ οὕτως γίνωιτο, ἀναίτιόν τινα κίνησιν.

What in later Stoicism comes closest to laws of nature are the distinctions between various types of natural movements of objects. For their coming into being it is required that certain antecedent conditions are fulfilled, and once they are fulfilled, the natural movement follows with necessity (see above, factors (i) to (iii)). But the circumstances are too complex for predictions of natural movements to be feasible. Moreover, not all movements are natural movements, and there is no hint that the Stoics thought that similar lawlike relations could be found for *all* changes that happened in the world—short of those relations including the whole state of the world, which are useless for the prediction or explanation of individual events. Accordingly, there are no signs that the Stoics were interested, or considered it possible, to predict the future on the basis of laws governing causal regularities (cf. 4.2).

This absence of universal laws as a basis for prediction has to do with the fact that Stoic determinism differs from modern versions, in that even in PHILOPATOR's theory the element of teleological order of the universe and predetermination of all events by a rational being is never given up or forgotten—or even out of sight. In Nemesius' presentation of PHILOPATOR's Causal Principle, the impossibility of counterfactual variation is accounted for by the reason that 'they (the things that happen) are predetermined that way from eternity . . .' (Nem. *Nat. hom.* 105.20–1). Similarly, in Alexander the statement of the principle in ch. 22 (*Fat.* 192.22–5) is immediately followed by the identification of Fate with God, and a reminder of the teleological organization of the universe. Thus PHILOPATOR's Causal Principle does not only (i) involve a concept of active causation and (ii) serve to support the Fate Principle (rather than to define determinism)—it is also (iii) itself backed up by a teleological assumption.

### 8.3 THE ROLE OF FATE IN PHILOPATOR'S THEORY

Before the discussion of PHILOPATOR's argument for the compatibility of fate and that which depends on us, the status and scope of fate in his theory needs to be established. In particular, we need to know how fate is connected with the natural movements, as determined by the three influence factors, (i) the proper nature of the object, (ii) the external, prompting causes, and (iii) the absence of external hindrances.

Nemesius evidently makes fate responsible for (i) the nature of the object (105.7–10, cf. 14–15), and (iii) the absence of hindrances (105.10–11, cf. 15–16). As regards external causes, we can infer that if fate determines whether hindrances are about or not, fate certainly also determines which external causes are present. Hence we can conclude that in Nemesius' report fate covers all three factors that are involved in natural movement.



In ch. 13 Alexander does not use the term 'fate' for any of the three factors. Fate comes in only in the several occurrences of the formula 'by fate through *x*' used to express the natural movement (8.1, 8.4). The absence of the use of 'fate' otherwise in ch. 13 has prompted some scholars to interpret the formula 'by fate through *x*' as meaning that fate encompasses only the external causes or circumstances, whereas the internal determining factor is not fate or fated, but 'truly' depends on us or our nature. That is, 'by fate' comes to mean 'externally caused', 'through *x*' means 'internally determined by *x*', and the whole formula refers to two separate co-ordinated factors rather than to one complex factor.<sup>36</sup> PHILOPATOR's defence of compatibilism then consists in the move of saving moral responsibility by exempting the principal causal determining factor in natural movements from fate.

This interpretation is faced with the difficulties that all natural movements, including those of stones, plants, and animals, would be equally exempted from fate's influence; that it does not square with the parallel passage in Nemesius; that Alexander, in his criticism of PHILOPATOR does not understand him in that way; and that there would be an unexplained discrepancy between necessity and fate: for Alexander stresses that the natural movements are necessary (see above, 8.2), and the passage implies that the necessity is a result of the co-operation of the first *two* factors.

These difficulties notwithstanding, it is true that ch. 13 in Alexander's *On Fate* is not decisive on the question of whether fate encompasses the proper nature of objects, insofar as this nature is a cause of the movement.<sup>37</sup> However, there are several passages in that work which stem from the same part of Stoic theory as ch. 13, and which permit a decision on what 'fate' stands for in the formula 'by fate through *x*'. In ch. 14 (*Fat.* 182.31–183.5) Alexander introduces an objection to the report of ch. 13, and in the course of this he repeats as part of the Stoic view:

... as different <movements> happen through different things by fate, and fate acts through the proper nature of each of the existing things ...<sup>38</sup> (*Fat.* 182.32–183.2)

<sup>36</sup> e.g. Long 1970, 261, and 1971, 180–1. This interpretation is the counterpart to the Identity Interpretation of Chrysippus' compatibilism which was discussed above in 6.4.7 and 6.4.

<sup>37</sup> Although the most straightforward reading of the concluding part of Alexander's report in ch. 13 suggests that fate works through the moving objects; cf. *Fat.* 182.8–11.

<sup>38</sup> ... ἄλλων δι' ἄλλων γινομένων ὑπὸ τῆς εἰμαρμένης, καὶ διὰ τῆς οἰκείας φύσεως τῶν ὄντων ἑκάστου τῆς εἰμαρμένης ἐνεργούσης.

This passage comes from the middle of a question addressed to the Stoics by Alexander, and is strictly speaking only evidence for Alexander's understanding of the Stoic theory. But most of the quote consists of Stoic formulaic phrases and terminology. In any event, the third passage I quote (*Fat.* 192.25–8) reports the Stoic view and confirms that in the present passage Alexander understands the Stoics correctly.

It could hardly be said more clearly what the phrase 'by fate' stands for, and that it includes the first factor. Similarly, in ch. 19, which—as both terminology and content show—picks up parts of ch. 13, Alexander reports the Stoic theory, accusing their author of holding that people cannot act otherwise than they do, since

they maintain, their nature [i.e. the nature of those people] is of such a kind, and it is in accordance with their proper nature that they do everything they do in accordance with fate, as it is for heavy things to fall downwards, when they are let go from above.<sup>39</sup> (*Fat.* 189.20–2)

The parallel between doing something 'in accordance with their proper nature' and doing something 'in accordance with fate' suggests that this proper nature is identical with (part of) fate—namely by being part of the pneumatic active principle, which is fate. Finally, in ch. 22, in the concluding sentence of Alexander's report from the Stoic view on fate, we read:

Fate . . . is present in all things that are and come to be, and in this way uses the proper nature of all things for the organization of the universe.<sup>40</sup> (*Fat.* 192.25–8)

This passage dispels all doubt that fate *is present in all things* (as their *pneuma*), and that it thus works from the inside of things, through their proper nature, in the case of natural movements.<sup>41</sup> That this sentence goes back to PHILOPATOR is clear from the fact that it follows on a presentation of PHILOPATOR's Causal Principle, which is a distinct mark of his theory.<sup>42</sup>

There can hence be no doubt that, according to Alexander's as well as Nemesius' report, for PHILOPATOR both the nature of the moving objects and the external circumstances prior to (and simultaneous with) the natural movement are in accordance with fate, and that in his formula 'by fate through  $\kappa$ ' 'by fate' at the very least *includes* the fate factor that manifests itself in the respective nature of the object.<sup>43</sup> The fact that fate works

<sup>39</sup> . . . τῷ τὴν φύσιν αὐτῶν εἶναι τοιαύτην, καὶ εἶναι τὸ κατὰ τὴν οἰκείαν αὐτοῖς φύσιν ἕκαστα πράττειν ὧν πράττουσιν καθ' εἰμαρμένην, ὡς τοῖς βαρέσι ἀφεθείσιν ἄνωθεν τὸ φέρεσθαι κάτω . . .

<sup>40</sup> Τὴν δὲ εἰμαρμένην . . . οὖσαν ἐν τοῖς οὐσίῳ τε καὶ γινομένοις ἅπασιν καὶ οὕτως χρωμένην ἀπάντων τῶν ὄντων τῇ οἰκείᾳ φύσει πρὸς τὴν τοῦ παντὸς οἰκονομίαν.

<sup>41</sup> The last two passages preclude the interpretation that fate works through us in the sense that it brings about our nature, but that our nature itself is not part of fate, so that our actions depend on us since they are (co-)caused by our nature, but *not* by fate. This is the determinist variant of the Identity Interpretation which I rejected for Chrysippus in 6.3.7 above.

<sup>42</sup> Generally, Alexander's long report of the Stoic 'view on fate' in ch. 22 squares well with orthodox Stoic philosophy, as we know it from Chrysippus.

<sup>43</sup> Further passages related to ch. 13 that confirm that 'by fate' refers to the fatedness of the objects' natures are *Fat.* ch. 31 203.12–15 and ch. 34 205.24–5, a passage discussed below in 8.5.

through us is also emphasized in the parallel passage in Calc. *Tim.* 161: 'our actions occur through us by fate'.<sup>44</sup> And I surmise that Lucian, in *Zeus catechized* 11, alludes to this very part of Stoic theory, when he, ironically, puts into Zeus' mouth the claim that 'Fate does everything through us'.<sup>45</sup> So, part of PHILOPATOR's goal is to make clear that fate is not a power that is only external to things and that forces them, but that it works also from within the objects, through their nature. And it is this second function of fate that is relevant for the compatibility of fate with that which depends on us.

#### 8.4 PHILOPATOR'S CONCEPTION OF THAT WHICH DEPENDS ON US

PHILOPATOR's is the first Stoic theory we have that contains a philosophical account of that which depends on us. There is a short version of it, 'that which happens through us', and a long version, 'that which happens through us by fate'.<sup>46</sup> This account may sound simplistic and rather vague. But that is deceptive. The 'through' (διὰ with genitive) in it is a technical term, which expresses a complex relation between an object and its natural movements.<sup>47</sup> The short form of the account, as it occurs at the beginning of Alexander's report, focuses primarily on the moving object itself. The long version, which contains an instance of the technical formula 'through *x* by fate', makes explicit the relation of the movement to fate.<sup>48</sup>

<sup>44</sup> Agi per nos agente fato. <sup>45</sup> ἡ Μοῖρα δι' ἡμῶν ἕκαστα ἐπιτελεῖ.

<sup>46</sup> Τὸ δι' ἡμῶν γινόμενον and τὸ δι' ἡμῶν ὑπὸ τῆς εἰμαρμένης γινόμενον.

<sup>47</sup> Most scholars do not recognize the phrase τὸ δι' ἡμῶν ὑφ' εἰμαρμένην γινόμενον as a *Stoic* account of that which depends on us. Some suspect that the expression δι' ἡμῶν is a formulation chosen by the critics of the doctrine (i.e. Alexander and Nemesius or their respective anti-determinist sources). So Sharples 1983, 143 'the expression δι' ἡμῶν at 181.14 (in Alexander) is probably not the determinists' own . . . but rather a reflection of libertarian criticism'; similarly Sharples 1978, 254 n. 124: 'the formulation with διὰ (in Nemesius and Alexander) may rather be his (i.e. Philopator's) libertarian critics' way of putting the point.' Cf. also Long 1970, 268. However, no arguments are adduced to back up this claim. As soon as one realizes the formulaic, technical character of the various prepositional phrases, and their relation with each other, it becomes clear that δι' ἡμῶν was part of the Stoic, technical, account of that which depends on us (see below).

<sup>48</sup> The long version is given in Nem. 106.10–11 in his concluding remark οὐκ ἄρα τὸ δι' ἡμῶν ὑπὸ τῆς εἰμαρμένης γινόμενον ἐφ' ἡμῶν ἐστι. This account is the main Stoic thesis that Nemesius tried to refute in his criticism. (It was presumably found at the end of the section from which Alexander presents his excerpt.) A remark in the margin of manuscript B, due to B<sup>2</sup> at the beginning of the Alexander passage (*Fat.* 181.14), shows that some scholar must have thought this to be the account also in Alexander: ἵσως δεῖ λέγειν· λέγουσιν ἐφ' ἡμῶν εἶναι τὸ ὑπὸ τε τῆς εἰμαρμένης γινόμενον καὶ δι' ἡμῶν. This form of the account does not occur anywhere in Alexander's text; but the καὶ in the text (deleted by Gercke

Most of ch. 13 in Alexander and Nemesius' summary report provide an explanation of the meaning of the prepositions 'through' and 'by' of the account, by way of placing that which depends on us in the hierarchical, classificatory scheme of kinds of natural movements.

What it means for an event or movement to happen through something by fate is explained by PHILOPATOR as follows: terminologically, a natural movement of some thing  $x$  is determined as 'that which happens by  $x$ '.<sup>49</sup> The natural movement of  $x$  is defined by way of the proper, or characteristic, nature of the thing  $x$ ; terminologically by the formula 'that which happens by  $x$  happens in accordance with  $x$ 's proper nature'.<sup>50</sup> In each case, for ' $x$ 's proper nature' the respective disposition or quality which makes up  $x$ 's proper nature can be substituted: e.g. heaviness in the case of stones, the faculty of impulse in the case of living creatures (e.g. *Fat.* 181.27; 182.6). In addition, it is stressed that for the occurring of any natural movement the above-discussed (8.2) three factors have to be present, and that taken together they necessitate the movement (*Fat.* 181.21–182.4; 182.13–16). This allows the transition from the formula that a movement 'happens in accordance with  $x$ 's proper nature' to the formula that it 'happens through  $x$  by fate'. In this formula 'through  $x$ ' determines the movement as a natural movement of  $x$ , and 'by fate' refers to the integration of the movement in the causal nexus by the co-operation of the causal factors, and, consequently, to its inevitability (8.3). All natural movement, up and down the Stoic *scala naturae*, can thus be described as 'movement through  $x$  by fate', where  $x$  gives the object that moves.

The final step in the explication is the introduction of the preposition 'depending on' (ἐπί with dative), as it occurs in the expression 'that which depends on us'. For living beings, their proper nature is impulse (ὁρμή), and their 'movements in accordance with their proper nature' are 'movements in accordance with impulse' (*Fat.* 182.5–6) or 'impulse-directed movements', as I also call them. These are movements that are the result of an externally induced impression in the mind, which prompts the impulse, which in turn brings about the movement—provided no hindrances interfere (cf. *Alex. Fat.* ch. 14). The term 'depending on  $x$ ' (in this context) is reserved for precisely those movements that happen in accordance with impulse, i.e. the natural movements of living beings. The events that happen through living beings by fate *depend on* those living beings (*Fat.* 182.12–13).

1885, Sharples 1983, and Donini 1974) could be a remainder of the original full account. Parallels to the long account, with the same formula 'through  $x$  by fate' occur in the Alexander passage for living beings (*Fat.* 182.7–8, 182.12–13), for stones (182.3–4), and in the universal formulation (183.1), cf. above, 8.1. For the short version of the formula compare *Fat.* 183.4 and 208.16.

<sup>49</sup> τὰ ὑπὸ  $x$  γινόμενα, cf. *Fat.* 181.18–21.

<sup>50</sup> κατὰ τὴν οἰκείαν φύσιν of  $x$ , *ibid.*

At this point, in Alexander the explanation seems to come to an end. And here a difficulty in our sources has been detected: we would expect from an orthodox Stoic theory, which refers to Chrysippus as its ancestor, that the essential feature of that which depends on us is assent and rational impulse, and hence in the present context that natural movements of human beings essentially involve assent; moreover that for the explication of that which depends on us, a reference to adult human beings, i.e. rational animals (λογικὰ ζῶα), as the Stoics would classify them, is essential—and not just to animals in general. But in our reports from PHILOPATOR, the line between rational and non-rational animals is never distinctly drawn, and the essential requirement for something's depending on some *x* appears to waver between impulse together with assent, and—more often—impulse alone. In Alexander's report in ch. 13 assent is mentioned only once, and rather in passing, in the very last sentence.

This difficulty can be satisfactorily cleared up once one realizes (i) that PHILOPATOR terminologically distinguished between that which depends on living creatures in general and that which depends on rational creatures in particular, and takes into account both (ii) that Alexander himself subscribed to a theory that involves a different concept of assent, which in his criticism he occasionally confounds with the Stoic one, and also (iii) that Alexander and Nemesius present only selected parts of PHILOPATOR's theory.

(i) Our texts suggest that PHILOPATOR used the phrase 'depending on *x*' (and accordingly the expression 'through *x*'), both in a generic and in a particular way, and that these two usages were unambiguously distinguished by what is each time inserted for '*x*': 'depending on living beings' (ἐπὶ τῷ ζῳῳ or ἐπὶ τοῖς ζῴοις) refers to living beings in general and is determined as 'through a living being by fate'—where 'through a living being' in turn is determined as 'in accordance with impulse'. The element of moral responsibility is not part of the meaning of the phrase 'depending on living beings', because living beings as such are not all morally responsible. 'Depending on us' (ἐφ' ἡμῖν) on the other hand refers to 'us', i.e. 'adult human beings' or 'rational beings'; it is determined as 'through us by fate', where 'through us' in turn seems to have been determined as 'according to impulse and assent' or 'in accordance with rational impulse' (see below). Before I attempt a philosophical explanation of this distinction, here is a brief textual backing:

Both Alexander and Nemesius introduce and conclude their reports with that which depends on *us*, the compatibility of which with fate is their main topic. Both texts show clear traces of the Stoic distinction between non-rational and rational animals, and the distinction must hence have been relevant to the explanation of that which depends on *us*.<sup>51</sup> In the Nemesius

<sup>51</sup> Alex. *Fat.* 181.16–17, confirmed by 205.24–32, which complements ch. 13; Nem. 106.6 and 12.

passage—which, unlike Alexander, generally focuses on rational beings—we find the application of the formula ‘by *x* in accordance with *x*’s nature’ to rational beings which is lacking in Alexander: ‘... happens by us and in accordance with our nature’ (106.3–4). Hence it is natural to assume that Alexander left it out of his report. In *Alex. Fat.* ch. 13, line 182.8 (before οὕτως δὲ τούτων ἐχόντων), and again line 182.16 (before ὅτι δέ) provide suitable slots where the introduction of that which depends on *us* could have been in Alexander’s source. (I assume that PHILOPATOR dealt with that which depends on *us* after the introduction of that which depends on living beings, treating it as a special case of the latter.)

That there is a distinction between ‘depending on *us*’ and ‘depending on living beings’ is corroborated by the way the two phrases are actually used: In our texts the expression ‘living being’ (ζῶον) is always used together with impulse but never with assent; and it is never used in connection with the expression ‘depending on *us*’ but always with ‘depending on living beings’; the expression ‘depending on *us*’ on the other hand is never used with ‘through living beings’ but always with ‘through *us*’. This holds not only of the Alexander and Nemesius passages at issue, but also of the parallel passages,<sup>52</sup> some of which will be discussed below.

The very occasional disregard of this distinction, in *Alexander’s* comments on the Stoics (*Fat.* 182.16–20), can be explained by the fact that Alexander misunderstood the Stoic position because of its similarity to his own: his view is that all living creatures have faculties of both impulse and assent, and that the difference between rational and non-rational creatures consists in the fact that human assent is in the main rational and deliberate, whereas animal assent is non-rational. It is easy to see how, having this view, Alexander messed up his presentation of the Stoic theory.

The sources thus all confirm *that* PHILOPATOR made a terminological distinction between ‘depending on *us*’ and ‘depending on living beings’. In order to see *why* PHILOPATOR made this distinction, we need to consider some further elements of his philosophy.

First, why did PHILOPATOR use ‘depending on’ to describe natural movements of living creatures in general? Alexander presents PHILOPATOR’s answer to this question in ch. 14:

They believe that <the things that happen through living beings> depend on living beings, since it is not possible that they happen through anything else, or through them in another way <than in accordance with impulse>.<sup>53</sup> (*Fat.* 183.9–10)

<sup>52</sup> e.g. *Fat.* ch. 14 184.12–13 and 22–4; ch. 33 205.1–12; ch. 36 208.2–12.

<sup>53</sup> ... τῷ δὲ μὴ δύνασθαι δι’ ἄλλου τινὸς ἢ διὰ τούτου γενέσθαι, μηδ’ ἄλλως ἢ οὕτως διὰ τούτου, τὸ εἶναι αὐτὰ <τὰ διὰ τοῦ ζώου γινόμενα> ἐπὶ τῷ ζῳῳ οἰηθέντες.

and

... the things that happen in accordance with impulse depend on living beings since it is not possible that they do the things that happen through them without impulse.<sup>54</sup> (*Fat.* 184.23–4)

Activity that is impulse-directed, or intentional, depends on living beings because (i) only living beings can move that way, i.e. intentionally, and (ii) all characteristic movements of living beings involve intention or impulse. Obviously, this criterion does not draw any connection to free-will or moral responsibility. It simply boils down to the statement that the phrase ‘depending on living beings’ is characteristically connected with impulse-directed movement in that impulse is a necessary and sufficient condition for a movement to depend on some living being.

But why does impulse-directed movement take so much space and appear to be the final element in the hierarchy in Alex. *Fat.* ch. 13? The answer is that PHILOPATOR’s argument is based first on a threefold hierarchy of natural *movements* (or self-motion). (This is only logical, since that which depends on us is a natural movement.) In this hierarchy impulse-directed movement is the highest category. And second, the argument involves a classification of living beings and their movements.

Compare a related later Stoic passage in Simplicius which presents a Stoic classification of self-motion:

The Stoics differentiate as separate classes: to move out of oneself, as the knife has cutting out of its own particular constitution, for its activity is carried out in conformity with its shape and form; to activate motion through oneself, as natures and curative powers produce their activity, for a seed, when sown, unfolds its own formulas, draws up the surrounding material, and transmits the form of its internal formulas; and also to act from oneself, which is, generically, to act from one’s own impulse . . .<sup>55</sup> (*Simp. Cat.* 306.19–25, trans. Hahm 1994, 181–2, modified)

In this hierarchy, too, impulse-directed movement determines the highest of three exclusive classes of natural motion (although the choice of characteristic prepositional phrases is different).<sup>56</sup> This classification ranks the

<sup>54</sup> . . . ἐπὶ τοῖς ζώοις εἶναι τὰ γινόμενα καθ’ ὁρμήν, ὅτι μὴ οἶά τε χωρὶς ὁρμῆς τὰ δι’ αὐτῶν γινόμενα ποιεῖν.

<sup>55</sup> . . . οἱ Στωικοὶ διαφορὰς γενῶν λέγωσιν τὸ ἐξ ἑαυτοῦ κινεῖσθαι, ὡς ἡ μάχαιρα τὸ τέμνειν ἐκ τῆς οἰκείας ἔχει κατασκευῆς (κατὰ γὰρ τὸ σχῆμα καὶ τὸ εἶδος ἡ ποίησις ἐπιτελεῖται), τὸ δὲ δι’ ἑαυτοῦ ἐνεργεῖν τὴν κίνησιν, ὡς αἱ φύσεις καὶ αἱ ἱατρικαὶ δυνάμεις τὴν ποίησιν ἀπεργάζονται (καταβληθέν γὰρ τὸ σπέρμα ἀναπλοῖ τοὺς οἰκείους λόγους καὶ ἐπισπάται τὴν παρακειμένην ὕλην καὶ διαμορφοῖ τοὺς ἐν ἑαυτῷ λόγους), ἀλλὰ μὴν καὶ τὸ ἀφ’ ἑαυτοῦ ποιεῖν, ὃ ἐστὶ κοινῶς μὲν ἀπὸ ἰδίας ὁρμῆς ποιεῖν . . .

<sup>56</sup> Concerning the reliability of the passage, in comparison with Origen, *Orat.* 6.1, I side with Hahm (1994, 183) rather than Inwood (1985, 23–4). Simplicius names the Stoics as authors. Origen does not, and becomes distinctly unStoic at the end of the parallel passage (*Princ.* 3.1.2–6). In any event, both sources may be reliable within limits, for the simple reason that they may report from *different* later Stoic theories.

various ways in which moving objects causally interact with the external world.<sup>57</sup> (Living creatures can and do in fact move in all three ways.) Simplicius continues:

and also to act from oneself, which is, generically, to act from one's own impulse, or else from rational impulse, which is called 'to perform an action', or, even more specifically, to be active in accord with virtue.<sup>58</sup> (*Cat.* 306.25–7, trans. Hahm 1994, 182, modified)

Here, with increasing specificity, three meanings of the phrase 'to act from oneself' are distinguished. First, the phrase denotes the entire class of impulse-directed movements. Second, it denotes actions, i.e. those impulse-directed movements that are brought about by means of rational impulse. Third, it denotes those impulse-directed activities that are in accordance with virtue. These are a subclass of human actions.

Thus whereas Simplicius first presented a hierarchically ordered distinction of mutually exclusive classes of natural motions, he now adds a distinction of three meanings of a term which *de facto* leads to three nested (hence not exclusive) classes of impulse-directed movement, of which the largest is identical with the previously distinguished highest class of natural movements. The criteria of classification in the two threefold distinctions differ. The first differentiates ways in which moving objects causally interact with the external world. The second distinction, by contrast, is not of different kinds of *motions* (they are all impulse-directed), but rather depends on the kinds of *beings* that move, in particular on the kinds of ruling part of the soul (ἡγεμονικόν) they have. For example, the impulse-directed activity of eating a sardine is essentially the same for my cat, me, and a sage. Rather, the reason that my cat performs only an activity, I an action, and the sage a good action, is that I act in virtue of my rationality (I had a rational impression that eating a sardine is desirable), and the sage, in addition, acts in virtue of the virtuous disposition of his or her mind (the sage eats the sardine because it is the right thing to do), whereas my cat does neither. The difference of the movements lies thus in non-physical qualities they have owing to a significant difference in the structure of the mind of the respective agent, i.e. in the factor that is responsible for producing impulses.

Back to PHILOPATOR. He introduced a hierarchy of natural motions, parallel to Simplicius' first Stoic distinction, in ch. 13 of Alexander's *On Fate*, and in the parallel Nemesius passage. As we shall see, the reason why PHILOPATOR makes use of such a hierarchy of natural motions is that he endeavours to demonstrate the compatibility of fate and that which

<sup>57</sup> Hahm 1994 contains an extensive discussion of this passage.

<sup>58</sup> ... ἀλλὰ μὴν καὶ τὸ ἀφ' ἑαυτοῦ ποιεῖν, ὃ ἐστὶ κοινῶς μὲν ἀπὸ ἰδίας ὁρμῆς ποιεῖν, ἕτερον δὲ ἀπὸ λογικῆς ὁρμῆς, ὃ καὶ πράττειν καλεῖται, τούτου δὲ ἔτι εἰδικώτερον τὸ κατὰ ἀρετὴν ἐνεργεῖν.



depends on us by showing how movements that depend on us fit in with the entire causal network, and for this it matters that the things that depend on us are the result of impulse. (The question of PHILOPATOR's compatibilism is discussed in 8.5.)

But we also find a parallel to the second threefold distinction from Simplicius in further bits of PHILOPATOR; and it is based on this second Stoic distinction that PHILOPATOR develops his concept of that which depends on *us*. The main evidence is recorded by Alexander in ch. 34 of *On Fate*: there we have a classification of living beings, as part of an argument for the preservation of moral responsibility:

Thus, in accordance with fate, living beings will perceive and have impulses, and of living beings some will simply be active, the others, i.e. the rational beings, will perform actions; and <of the latter> some will act wrongly, the others rightly. For, for them, this is in accordance with nature . . .<sup>59</sup> (*Fat.* 205.27–30)

Here we find the distinction between non-rational and rational living beings that was already alluded to in our main passages (see above); the characteristic activities are 'just being active' for non-rational living beings, and 'acting' or performing actions, for the rational ones; i.e. the verb 'to perform actions' (*πράττειν*) is again reserved for rational beings. (As example for something that depends on us, we have 'walking' (*περιπατεῖν*, *Nem. Nat. hom.* 105.11–12).) As in Simplicius, this is followed by a further division, discriminating between those rational beings that characteristically perform morally wrong actions, and those which, in accordance with their nature, perform right actions.

The connection between the expression 'depending on *x*' and the subdivision of living beings and their characteristic activities, too, is drawn in Alexander:

to say that those things that happen through deliberation depend on human beings, since it is not possible that they happen through them in any other way.<sup>60</sup> (*Fat.* ch. 14 184.32–185.1, cf. 184.25–6)

In this clause the same Stoic kind of criterion that was introduced earlier in ch. 14 for something's depending on living beings in general is applied

<sup>59</sup> . . . οὐκοῦν κατὰ τὴν εἰμαρμένην καὶ αἰσθήσεται τὰ ζῷα καὶ ὀρμήσει, καὶ τὰ μὲν τῶν ζῶων ἐνεργήσει μόνον τὰ δὲ πράξει τὰ λογικά, καὶ τὰ μὲν ἀμαρτήσεται τὰ δὲ κατορθώσει. Ταῦτα γὰρ τούτοις κατὰ φύσιν . . .

This is another passage related to ch. 13, as is clear from the introduction in *Fat.* 205.25–6, the terminology (*ἐνεργήσει*, etc.) and the remark in the last clause that the different activities belong to their 'agents' in accordance with nature.

<sup>60</sup> . . . τὸ λέγειν τὸ τὰ διὰ τοῦ βουλευέσθαι γινόμενα ἐπὶ τῷ ἀνθρώπῳ εἶναι, τῷ μὴ δύνασθαι ἄλλως τι δι' αὐτοῦ γίνεσθαι.

expressly to human beings. And here the additional characteristic feature is, as expected, some kind of rationality.<sup>61</sup> Similarly, in Nemesius the formula 'by  $x$  in accordance with  $x$ 's nature' is applied to 'us': 'happens by us and in accordance with our nature, i.e. impulse and judgement' (Nem. 106.3–4).

The same type of criterion is applied again to point out that moral nature, i.e. virtue and vice, is characteristic exclusively of human living beings:

For if in their theory only virtue is good and only vice is bad, and none of the other living beings is capable of being either of these, and of human beings most are bad . . .<sup>62</sup> (*Fat.* ch. 28 199.14–16)

Human beings are hence characteristically rational and moral agents. (This is evident additionally from the subdivision of rational activity into right and wrong actions.) Just as intentional activity depends on living beings because it is characteristically and exclusively *living beings* that perform that kind of activity, so rational intentional activity (which intrinsically has a moral dimension), i.e. action, depends on *human beings* because it is characteristically and exclusively human beings that perform that kind of activity.<sup>63</sup>

The hierarchy of natural motions and the subdivision of living beings and their impulse-directed movements thus complement each other as follows in PHILOPATOR: The way impulse-directed movements are integrated into the causal chain is basically the same for all types of such

<sup>61</sup> Assent or reason (*lógos*) would have fitted better than the Peripatetic term 'deliberation', which may be Alexander's doing to bring the account in line with his criticism. The authorship of PHILOPATOR of this criterion is likely because of the exact correspondence in formulation to the criterion for 'depending on living beings' in *Fat.* 183.9–10 and 184.23–4. But we cannot rule out the possibility that Alexander made it up in parallel to *Fat.* 183.9–10. Alexander's objection that not all actions of human beings are deliberated does not hit the Stoics: for them *all* actions are rational, since they are the result of rational impulse.

<sup>62</sup> εἰ γὰρ ἡ μὲν ἀρετὴ τε καὶ ἡ κακία μόναι κατ' αὐτοὺς ἡ μὲν ἀγαθόν, ἡ δὲ κακόν, καὶ οὐδὲν τῶν ἄλλων ζώων οὐδετέρου τούτων ἐστὶν ἐπιδεκτικόν, τῶν δὲ ἀνθρώπων οἱ πλείστοι κακοί . . .

<sup>63</sup> The same point is made by one of the Latin authors whose report of the Stoics goes clearly back to PHILOPATOR (see Sharples 1978). Here is the parallel passage: 'Moreover, they say that the motions of our souls only function as servants of the decrees of fate, since it is necessary that actions take place through us by fate's acting; that, in this way, man has the status of those things of which it is said "without them no action can take place", just as motion or rest cannot exist without space.' (Calc. *Tīm.* 161, trans. den Boeft modified) ('Animorum vero nostrorum motus nihil aliud esse, quam ministeria decretorum fatalium, siquidem necesse sit agi per nos agente fato. Ita homines vicem obtinere eorum quae dicuntur, sine quibus agi non potest, sicut sine loco esse non potest motus aut statio'.) It is essential to understand 'action' in the technical Stoic sense of 'activity that is the result of rational impulse' i.e. a motion of the soul specific to human beings.

movements (see 8.5). But in the case of human beings what happens inside the soul is categorically different from what happens in animals. This is so because for the Stoics, human beings are essentially rational; that is, *all* our impressions are rational and *all* our impulses are rational and involve assent (cf. 6.1.2). It follows that our actions, i.e. the things that have been traditionally taken to depend on us, turn out to be precisely the class of our impulse-directed movements, i.e. those defined by PHILOPATOR as *depending on us*, where 'depending on *x*' is synonymous with 'in accordance with *x*'s impulse'.

But the fact that the things that depend on us are our impulse-directed movements is not the reason why we are morally responsible for them. Moral responsibility for actions is grounded on the fact that the agents which produce the impulse-directed movements (i.e. we) are rational and have intrinsically a moral dimension.

Thus, for PHILOPATOR in the phrase 'depending on us' it is not the expression 'depending on *x*' (*ἐπὶ x*) which indicates that the *agents* can be held morally responsible for their natural movements. Rather, whether someone is morally responsible for a movement that depends on them is contingent upon what kind of living creature they are, or, in terms of the phrase 'depending on us', it is contingent upon the 'us', not on the 'depending on'.

The hierarchical classification that leads to the category of 'depending on *x*' is based on a distinction of kinds of natural *movements*, based on how these movements are causally bound into the world. The classification that leads to the attributability of moral value is based on a division of kinds of *beings that move* via impulse. Moral responsibility is not marked out by a special type of causality, and morally qualified actions are not distinguished by being, physically seen, a special kind of movement. What makes morally qualifiable activities special is that they have been produced by a certain kind of agent, namely by a rational being, and that they are the result of the working of this rationality. But they themselves, *qua* physical movements, are not distinguishable from animal movement in general. (Psychologically, with a 'black-box model', there would be no significant difference between me first perceiving, then eating a sardine, and my cat first perceiving, then eating one.)

That is, unlike non-rational animals, human beings have the ability to reflect upon their impressions, and evaluate them in the light of their notions of good and bad, and consequently to either give or refuse assent to an incoming impression. How an individual person does that, and what the outcome is, depends on that person's individual nature. But although the human ability to give assent upon reflection on our impressions in the light of evaluative notions is the closest Stoic equivalent to a faculty of the will, by which we can make decisions, this fact plays no direct role

in PHILOPATOR's argument for compatibilism as far as it has come down to us. Neither is the determinedness or undeterminedness of the decision at issue anywhere in the argument. PHILOPATOR's concept of that which depends on us has very little to do with modern concepts of free will or freedom to do otherwise.

In my above classification of concepts of 'depending on someone' (6.3.5), PHILOPATOR's concept comes out not as potestative and two-sided, but as causative and one-sided. This may be an uncommon understanding of the phrase ἐφ' ἡμῶν, but the text leaves little doubt about it: that which is ἐφ' ἡμῶν is defined as that which happens (τὸ γιννόμενον) through us. The things that depend on us thus belong in the category of particular events; more specifically they are classified as movements. The property that marks out the events that depend on us (i.e. actions) is that they are caused in a specific way, namely through (διὰ) the agent. (The concept of ἐφ' ἡμῶν is hence causative.) Thus, if an action depends on me, I caused it in a specific way. Its opposite—or any prospective alternative actions—did not depend on me; for they did not happen through me. They did not happen at all. It follows that PHILOPATOR's concept of that which depends on us is not two-sided.

If we compare Chrysippus and PHILOPATOR on this point, we can see the development that has taken place: Chrysippus did not define that which depends on us, and took the category of things that depend on us as given (6.3.5). Presumably he used the expressions ἐφ' ἡμῶν and παρ' ἡμῶν in their common meaning, i.e. the first as potestative, two-sided, the second as causative, one-sided (6.3.5). He *justified* the compatibility between the things that depend on us and his fate theory by showing that *we, qua* rational, moral beings, are causally responsible for those of the things that depend on us that actually happen (6.3.5). This causal responsibility is guaranteed by our making use of our faculty of assent. PHILOPATOR—it seems—turns this Chrysippean justification into a *definition* of that which depends on us, by determining it as that which happens through us in the sense that it is caused by us by means of rational impulse or assent. Thus we witness the change from an unreflective use of a common phrase in order to justify moral responsibility, to a reflective analysis of the concept of that which depends on us, culminating in a philosophical definition.

## 8.5 PHILOPATOR'S COMPATIBILISM

The emphasis on fate and on the necessitation of the natural movements, as well as various comments by Nemesius (106.10–11) and Alexander (e.g. *Fat.* 182.26–31) make it clear that in the two passages quoted at the beginning of this chapter (8.1), PHILOPATOR argued for the compatibility of fate

and that which depends on us. Both passages have left commentators unsatisfied, since they could not find such an argument in them, and both authors have been suspected of having distorted their source. But this problem with PHILOPATOR's defence of compatibilism is in the first instance that of the modern reader: we expect PHILOPATOR to discuss a certain philosophical problem, and when we cannot detect such a discussion in the text, we surmise that something must be wrong either with the argument or with its transmission; we expect PHILOPATOR to show how our freedom of decision, or to do otherwise, can be reconciled with universal causal determinism, and we expect him to do this by showing how human decision (as opposed to animal choice) is woven into the causal network in some way specific to it.

On both counts we are bound to be disappointed. PHILOPATOR has a different agenda, since his problems and conceptual framework differ from ours. His aim is to demonstrate that the things generally considered as depending on us, i.e. human actions, are preserved in Stoic determinism, in that they can be integrated into the causal network that is fate. (This was Chrysippus' goal, too (6.3.4–5).) And he does this by (i) showing how impulse-directed movements fit in with the causal network,<sup>64</sup> and (ii) arguing that human actions are a subclass of impulse-directed movements. This kind of argumentation is orientated towards Stoic human and animal psychology—which also explains why Alexander, with his Peripatetic libertarian outlook, has some difficulties in grasping it.

The division of the argumentative steps (i) and (ii) becomes clearer when one realizes that what matters for PHILOPATOR's compatibilism is the way in which the things that depend on us (i.e. human actions) are bound into the causal network. For this causal network is how fate manifests itself. But from the perspective of its causal relations to the external world there is no difference between human action and animal activity.<sup>65</sup> In both cases external objects elicit impressions in the ruling part of the soul, and in response, the ruling part, via impulse, prompts certain physical activities of the living beings. (I assume that it is this particular mechanism of impression as input, activity in accordance with impulse as output, or of desire-directed activity, which was the reason for introducing the phrase

<sup>64</sup> This is confirmed e.g. by Alex. *Fat.* ch. 38 211.28–31: '... they do not preserve that which depends on us if they demonstrate that impulse-directed movement is retained for living beings when everything happens in accordance with fate, except if someone would want to say simply that that which happens by something in accordance with its proper nature depends on that thing ...' (... μηδὲ [οἱ] ἐκ τοῦ δεικνύναι τὴν καθ' ὁρμὴν κίνησιν τοῖς ζώοις μένουσαν πάντων γινομένων καθ' εἰμαρμένην σώζουσιν τὸ ἐφ' ἡμῖν, εἰ μὴ βούλοιτό τις ἀπλῶς τὸ ὑπὸ τιος κατὰ τὴν οἰκείαν γινόμενον φύσιν ἐπ' ἐκείνῳ λέγειν ...); cf. also ch. 33.

<sup>65</sup> Cf. on this point also Hahm 1994, 217.

'depending on' (*ἐπὶ c. dat.*) on this level of the hierarchy, but not earlier (cf. *Fat.* 182.18–20). For, the capacity of impulse is not only a highly complicated mechanism, it also lends a being a kind of control over its movements which is entirely absent in the case of growing plants and rolling stones.)

Since then there is no difference between impulse-directed motions of non-rational and rational animals when it comes to their causal embeddedness in the external world, it follows that one has shown how actions, *qua* physical movements, are compatible with fate, if one shows how activity by impulse in general fits in with the causal network. Hence we can see that Alexander's ch. 13 is part of the argument for compatibilism, since it shows precisely this, by explaining the interaction of internal and external causal factors and external hindrances, and how fate works both through living beings and external to them. The argument proceeded by giving the same general explanation for the fatedness of the movements of stones, plants, and living beings.

Thus the main part of Alexander's report in ch. 13 serves to establish how, generally, impulse-directed movement is integrated into the causal network (point (i), above). This explains why, although described as about that which depends on us, the passage deals primarily with the movements which depend on living beings in general and with their necessitation.

The other part of the argumentation, the one that subsumes human action under impulse-directed movements (point (ii), above), is reported and criticized by Alexander separately, in ch. 33. Here is the argument, characteristically and unhelpfully packed all into one sentence by Alexander:

- (1) But to say that those people err who do not believe (2) that by the preservation of the activity of living beings in accordance with impulse thereby that which depends on us is preserved, (3) since everything that happens in accordance with impulse depends on those who have the impulse, (4) and because of this to ask (5) whether that which depends on us is not an activity, (6) and assuming this, in addition again to ask (7) whether it does not seem that some of the activities are in accordance with impulse, others not in accordance with impulse, (8) and assuming this, again to add to it (9) that that which depends on us does not belong to those activities that are not in accordance with impulse, (10) and having agreed upon this, in addition to assume (11) that everything that happens in accordance with impulse depends on those who are active in that way, (12) since that which depends on someone does not belong to any of the things that are active in another way <i.e. not according to impulse>, (13) and to say, because of this, according to them (14) that which depends on us in the sense of that which is possible to happen by us and not to happen is preserved, too (15) since the things that happen in this way, too, belong to the things that happen in accordance with impulse,

(16) how is that not the reasoning of people who are totally ignorant . . . ?<sup>66</sup>  
(*Fat.* 205.1–12)

This argument perfectly complements the section on that which depends on us reported in ch. 13. Presumably, it originally followed fairly close upon the passage in ch. 13.<sup>67</sup> (1) introduces the argument. (2) presents the demonstrandum and connects the argument with the result of the passage from ch.13: What is to be proved is that that which depends on us is preserved in a system of universal fate-determinism.<sup>68</sup> It is important to understand (2) as 'by the preservation of the activity of living beings within our theory of fate, *as has been shown already*'. That is, the argument does not claim to show that or how impulse-directed activity is preserved. Rather its purpose is to show how, *given that this has been shown*, and based on this, the preservation of that which depends on *us* can also be shown. (3) anticipates the main step of the argument.

The argument itself, given in (4)–(15), is put forward in dialectical fashion, questioning to obtain consent from the interlocutor to the premisses or assumptions brought forward, cf. (4), (6), (8), (13). Its premisses are (5), (7), (9), (14), (11), and the assumption from (2) that activity according to impulse is compatible with fate. In a tidied-up version the argument runs:

<sup>66</sup> (1) Τὸ δὲ λέγειν ἐψεῦσθαι\* τοὺς οὐχ ἡγουμένους (2) ἐν τῷ σώζεσθαι τὴν καθ' ὁρμὴν τῶν ζώων ἐνέργειαν ἥδη σώζεσθαι καὶ τὸ ἐφ' ἡμῖν (3) τῷ [μὴ] πᾶν τὸ καθ' ὁρμὴν γινόμενον ἐπὶ τοῖς ὁρμώσιν εἶναι (4) καὶ διὰ τοῦτο ἐρωτᾶν, (5) εἰ μὴ ἐνέργημα τι τὸ ἐφ' ἡμῖν ἐστί, (6) καὶ λαβόντας ἐπὶ τούτῳ πάλιν ἐρωτᾶν, (7) εἰ μὴ τῶν ἐνεργημάτων τὰ μὲν εἶναι δοκεῖ καθ' ὁρμὴν, τὰ δ' οὐ καθ' ὁρμὴν (8) ὁ λαβόντας πάλιν προστιθέναι τούτῳ τὸ (9) μὴ τῶν ἐνεργημάτων μὲν, μὴ καθ' ὁρμὴν δὲ εἶναι τὰ\*\* ἐφ' ἡμῖν, (10) οὐ καὶ αὐτοῦ συγχωροῦμενου ἐπὶ τούτοις λαμβάνειν τὸ (11) πᾶν τὸ καθ' ὁρμὴν γινόμενον ἐπὶ τοῖς οὕτως ἐνεργοῦσιν εἶναι, (12) ἐπειδὴ ἐν μηδενὶ τῶν ἄλλως ἐνεργουμένων ἐστί, (13) καὶ διὰ τοῦτο λέγειν (14) σώζεσθαι κατ' αὐτοὺς καὶ τὸ τοιοῦτον ἐφ' ἡμῖν, ὃ δυνατόν ὑφ' ἡμῶν γενέσθαι τε καὶ μὴ, (15) ἐπειδὴ\*\*\* καὶ τὰ οὕτως γινόμενα ἐν τοῖς καθ' ὁρμὴν γινόμενοις ἐστί, (16) πῶς οὐ παντάπασιν ἀγνοούντων ταῦτα . . .

\* Or any other verb with the general meaning 'to be wrong' has to be emended for the manuscript reading ἡγέσθαι; for a selection of possibilities cf. Sharples's notes on the text, Sharples 1983, 264.

\*\* I put τὸ for τι with Gercke and Apelt. For in the whole argument and its criticism by Alexander only τὸ ἐφ' ἡμῖν occurs, and besides it simplifies the structure of the argument.

\*\*\* ἐπειδὴ . . . ἐστί for εἶναι δὴ . . . ἐστί must be right.

<sup>67</sup> That it goes back to the same source is clear from the fact that there is a wide correspondence both in terminology and content of the two passages. This is also suggested by two further passages from PHILOPATOR, which seem to refer to the argument and take it as part of the doctrine given in ch. 13, and connect it with the Fate Principle (ch. 36 208.10–12; ch. 38 214.28–31). Moreover, in ch. 14, where Alexander discusses the doctrine recorded in ch. 13 and slips in a few more scraps of it, he also gives premiss (11) and its justification (12) of the argument of ch. 33 (*Fat.* 183.9–10, see above 8.4).

<sup>68</sup> Cf. again *Fat.* ch. 36 208.10–12; ch. 38 214.28–31, and Alexander's constant designation of his Stoic opponents as 'those who say that all things happen by fate' or 'by necessity'.

The things which depend on us (i.e. our actions) are activities (5).<sup>69</sup>

Activities are either in accordance with impulse or not (7).

The things which depend on us are not not in accordance with impulse (9).

The things which depend on us are in accordance with impulse (15).

This intermediate conclusion, in which that which depends on us is subsumed under movements in accordance with impulse is at this point skipped, and added later (in 15), in a causal clause, to the conclusion. (11/12) then introduces the Stoic use of the expression 'depending on  $x$ ' for movements in accordance with  $x$ 's impulse. Its function is presumably to justify the thesis that the concept of impulse-directed movements does truly encompass those movements that depend on the moving being, by showing that there is no other possible place for such movements. (For example, there is no other way of explaining a movement like eating than as being the result of an impression and impulse.) We are familiar with this kind of justification from Alex. *Fat.* ch. 14 183.9–10 and 184.21–4 (see 8.4 above).

Before the conclusion can be drawn, the presupposed assumption from (2) is required: '<As has been shown earlier,> that which is in accordance with impulse is preserved <within Stoic determinism>'. (14) then gives the conclusion: 'Hence the things which depend on us, too, are preserved <within Stoic determinism>'.<sup>70</sup>

The argument is thus based on the distinction between that which depends on living beings in general and that which depends on us in particular, and on the result of the passage from ch. 13, that that which depends on living beings is compatible with fate. Its main argumentative point is this: The things that depend on us are impulse-directed activities (5), (7), (9), (15). Impulse-directed activities are compatible with fate (2). Therefore, the things that depend on us, too, are compatible with fate (14). Understood in this way, the argument appears valid, if rather unexciting.<sup>71</sup>

<sup>69</sup> The text implies that activities are a subset of events (*γνώμενα*) and hence of movements, and the term 'activity' (*ἐνέργημα* seems to be the Stoic technical expression) is not restricted to movements in accordance with impulse, but covers also (some) non-intentional occurrences. (Although I am not aware of any Stoic source where it is in fact used for non-purposive events.) It seems unlikely that all movements were considered activities. Thus, if 'activity' had a technical meaning in the present context (chs. 13, 33, etc.), I suggest that it referred to something like natural motion or self-motion.

<sup>70</sup> For the specific account of 'that which depends on us' in (14) see below.

<sup>71</sup> Alexander in his criticism of the argument (*Fat.* 205.12–21) as well as Sharples in his commentary on the passage (Sharples 1983, 169) consider the reasoning as invalid. This is due to the fact that both, in my view mistakenly, take (11), and accordingly (3), as conclusion of the argument, and not as part of the assumptions from which the conclusion is drawn. That (11) is a further *assumption* on which the interlocutors have to agree is clear from the use of *λαμβάνειν*, which was used in this sense twice before in this passage, and is standard for Stoic logic to introduce premisses. Alexander takes (11) in the sense of 'all events according to impulse depend on us' (*Fat.* 205.14f.) since in his criticism he fails to discriminate between 'depending on living beings' and 'depending on us'.



PHILOPATOR's reasoning in ch. 33 is thus a bit of a disappointment for anyone who expected an argument about how the concept of free will, or that of moral responsibility, can be preserved in a fully causally determined system.

One point I have passed over so far is the fact that in the argument in ch. 33 'that which depends on us' is determined as 'that which is possible to happen by us and not <to happen by us>' (14).<sup>72</sup> This is the only time in the whole of Alexander's treatise (and the parallel sources) that an account of that which depends on us is given for the Stoics that differs from the account 'that which happens through us'. It resembles Alexander's Peripatetic accounts such as 'that over which we have control both of doing and of not doing it' (*Fat.* 169.13–15), and 'the power over choosing and doing opposite (actions)' (cf. *Fat.* 181.5, 12–14, see 8.7). Moreover, in ch. 26 of Alexander's *On Fate* we have a Stoic argument against the claim that 'those things depend on us, of which we are able also <to do> the opposites'<sup>73</sup> (*Fat.* 196.24–5, see 8.7).

One way that has been taken out of this difficulty, is to assume that Alexander simply slipped *his* concept of that which depends on us into the argument (Sharples 1983, 168, Zierl 1995, 220). This may be so. However, the formulation in the argument differs from the various Peripatetic ones which Alexander gives, and also from the one the Stoics criticize in ch. 26. The account could hence stem from Alexander's Stoic source. For first it uses the technical phrase 'by us' (ὕφ' ἡμῶν) from ch. 13 (see 8.3). Then, the expression 'to be possible' (δυνατόν εἶναι) from the account is an expression used in Stoic modal logic (see 3.1) for possibility, and is different from the expression 'to be able' (δύνασθαι), which refers to an ability of an object.<sup>74</sup> The early Stoics maintained that that which depends on us is possible and non-necessary, i.e. contingent. Hence if some activity of  $\phi$ -ing depends on me, then 'I will  $\phi$ ' and 'It is not the case that I will  $\phi$ ' are both possible and non-necessary. And, according to the Stoic understanding of what it means that something 'happens through someone', 'possible to happen by us and not <to happen by us>' should mean just that, that (i) it is possible that 'I will  $\phi$ ' and that (ii) it is possible that 'I will not  $\phi$ '.<sup>75</sup> In conformity with the modal accounts, this two-sided possibility would be understood as the absence of external force and hindrances (3.1.4, 3.1.5).

<sup>72</sup> ὁ δυνατόν ὑφ' ἡμῶν γενέσθαι τε καὶ μή.

<sup>73</sup> Ταῦτά ἐστιν ἐφ' ἡμῶν ὧν καὶ τὰ ἀντικείμενα δυνάμεθα.

<sup>74</sup> In *Nem.* 103–4 and [*Plut.*] *Fat.* 571a we find distinctions between τὸ δυνατόν and δύνασθαι which must be approximately contemporary with PHILOPATOR's, see 8.7.

<sup>75</sup> We thus would have a concept of two-sided possibility combined with a one-sided concept of depending on us: walking and not-walking may both be possible for me, but only one will happen through me, and only that one will depend on me. For this use of the modal notions in the context of free action by the Stoics cf. Origen, *Cels.* II 20 340.55–342.61.

Taking ch. 13 and ch. 33 together, the compatibilist problem of how an action can be both fated and depend on us, has then been unfolded by PHILOPATOR as follows:

The things of which it is to be shown that they are both dependent on us and fated are human actions. Actions are classified as natural movements. An action is in accordance with *fate*, since, like all natural movements, it is fully causally determined (in accordance with the world order), namely by a combination of internal and external causal factors, which are all part of fate. The specific way in which it is bound in the causal network is via impulse. The faculty of impulse of the ruling part of the soul is causally responsible for the natural movements of living beings (i.e. impulse-directed movements). This specific causal activity justifies us in saying that the natural movements of living beings 'depend on' them (ch. 13). And as we are a species of living beings, our impulse-directed movements (i.e. our actions) hence depend on us. They can be causally attributed to us (ch. 33). At this point the argument for the compatibility of fate and that which depends on us has in principle been completed.

But it has not been shown that we can be held morally responsible for those things that depend on us; this is done in a different part of the theory: moral responsibility is attached to human actions not because they are causally bound into the world in a way particular to them, but because the beings that cause the actions have certain specific characteristics, namely are intrinsically rational and moral, and their actions can be assessed in that light—as has been set out in 8.4.

If one compares Chrysippus' and PHILOPATOR's compatibilism, their theories appear to be quite similar. PHILOPATOR retained all the basic principles Chrysippus had. This comes as no surprise, since Philopator obviously knew Chrysippus' works and most probably referred to him (see above 8.1). Both Stoics hold a theory of universal causal fate-determinism with no special role for astrology. Both maintain that fate works basically in two ways: it determines the nature of every object and it determines the external circumstances in which this object is found. Furthermore, both emphasize the point that fate does not (in the normal case) force human beings in their actions. Human beings act in accordance with their assents and impulses—which are fated. At the same time both philosophers lay stress on the fact that every movement, up to the smallest detail, depends on fate.

There are, however, a number of clear differences between Chrysippus and PHILOPATOR and his generation. PHILOPATOR is the first Stoic of whom we know that he formulated, discussed, and defended a principle of causation which states that the same causes, together with the same starting situation, necessarily result in the same effect. PHILOPATOR is also the first Stoic of whom we know that he had a philosophical concept of that which depends on us (see 8.4). Furthermore, in PHILOPATOR

the issue of compatibilism and that of moral responsibility come apart. The compatibility of the facts that human actions are caused by us and that they are fated is established independently of the moral dimension human beings and their actions have. And only PHILOPATOR, it seems, was confronted with the problem of causal determinism and free-will in its modern guise. But before this point is discussed (in 8.7), a brief look at what happened to the cylinder example in PHILOPATOR.

## 8.6 THE CYLINDER IN LATER STOIC FATE THEORY

Chrysippus used the cylinder as an example to illustrate his compatibilism. In PHILOPATOR's theory, the cylinder recurs, but it seems that its function has changed. Compare the following two passages:

But if we did everything we do through certain pre-determined causes, so that . . . we do each thing we do in a definite way, similar to the fire that warms and the stone that falls downwards, and the cylinder that rolls down the plane . . .<sup>76</sup> (Alex. *Fat.* 179.12–17)

It is not given to the cylinder to direct its individual movement everywhere, nor to water, nor fire nor those other things that are administered by nature <i.e. plants> or by a non-rational soul. For there are many things that prevent and hinder them. But intellect and reason can make their way through every adverse circumstance in the way they are by nature and they will. Setting before your eyes this ease with which reason moves through everything, as fire upwards, as a stone downwards, and as a cylinder down a plane. . . .<sup>77</sup> (Marcus Aurelius, 10.33.3)

These are the only passages that provide a list of fire, stone, and cylinder with their characteristic movements and the parallels are so close that they must stem from the same part of Stoic theory.<sup>78</sup> For Alexander, the two examples of fire and heat and stone and downward movement clearly connect the passage with the Stoic compatibilist theory of ch. 13.

<sup>76</sup> εἰ δὲ εἴημεν πάντα ἃ πράττομεν πράττοντες διὰ τινος αἰτίας προκαταβεβλημένης ὥς . . . ἀφωρισμένως ἕκαστον πράττειν ὡς πράττομεν, παραπλησίως τῷ θερμαίνοντι πυρὶ καὶ τῷ λίθῳ τῷ κάτω φερομένῳ καὶ τῷ κατὰ τοῦ πρηνοῦς κυλιομένῳ κυλίνδρῳ . . .

<sup>77</sup> Τῷ μὲν οὖν κυλίνδρῳ οὐ πανταχοῦ δίδοται φέρεσθαι τὴν ἰδίαν κίνησιν οὐδὲ τῷ ὕδατι οὐδὲ πυρὶ οὐδὲ τοῖς ἄλλοις, ὅσα ὑπὸ φύσεως ἢ ψυχῆς ἀλόγου διοικεῖται· τὰ γὰρ διείργοντα καὶ ἐνιστάμενα πολλὰ. Νοῦς δὲ καὶ λόγος διὰ παντὸς τοῦ ἀντιπίπτοντος οὕτω πορεύεσθαι δύναται, ὥς πέφυκε καὶ ὥς θέλει. Ταύτην τὴν ῥαστώνην πρὸ ὁμμάτων τιθέμενος, καθ' ἣν ἐνεχθήσεται ὁ λόγος διὰ πάντων, ὥς πῦρ ἄνω, ὥς λίθος κάτω, ὥς κύλινδρος κατὰ πρηνοῦς . . .

<sup>78</sup> There is no reason to doubt Stoic origin of this theory, since Alexander's remark is aimed at his Stoic opponents, and Marcus reports with approval; for further reasons, see below.

The passage in Marcus is of particular interest as it displays a surprising number of parallel points to the Nemesis passage (*Nat. hom.* 105–6) some of which we do not find in Alexander. I assume that the use to which the bit of theory is put, i.e. basically as a recommendation for moral behaviour (that is, living in accordance with Nature), is Marcus' own doing and was not part of the theory from which he reports. The parallels to Nemesis (passages in brackets) are then:<sup>79</sup>

- He refers to the whole hierarchy of beings: water, fire, nature (i.e. the Stoic technical term for the characteristic pneuma of plants, see 1.1.1), non-rational soul (the Stoic technical term for the characteristic pneuma of living beings), intellect and reason (for rational living beings) (105.7–10).
- He refers to fire and upward movement (105.9).
- He refers to characteristic movements as *given* (δίδοται) to each type of being (105.6, δεδóσθαι). This suggests a connection with Stoic theory of fate.
- He refers to water as one of the types of being (105.6–7).
- He refers to the characteristic movement of each type of thing (ἰδίᾳ κίνησις, cf. in 10.33.2 ἰδίᾳ φύσις and τὰ οἰκεία τῇ τοῦ ἀνθρώπου κατασκευῇ) (105.6, 106.3–4; Alexander's standard phrase is οἰκεία φύσις, cf. above 8.2).

The passage in Marcus shows more similarities to Nemesis and Alex. *Fat.* ch. 13 and related passages than any other Greek passage does. Hence we can assume that Marcus Aurelius was acquainted with the later Stoic theory of PHILOPATOR from which Nemesis and Alexander draw.

As regards chronology, this fits perfectly: we know that the Stoic Junius Rusticus provided Marcus with Epictetus' works from his (Rusticus') library. Following the remark in Galen (Kühn 5.41), Philopator might perhaps not still have been teaching in the 170s; but certainly his writings must have still been 'contemporary' theory. So Rusticus or anyone else could have provided Marcus with some *contemporary* Stoic theory of fate and physics. At the very least this passage in Marcus shows that some contemporary theory of fate and natural movements of the PHILOPATOR tradition was around and read in Rome in the second century.

The reason why these brief parallel passages from Alexander and Marcus are of interest to us is the mention of the cylinder (which occurred neither in Nemesis nor in Alex. *Fat.* ch. 13). Rolling cylinders, spheres, and

<sup>79</sup> These similarities of the passage from Marcus with Nem. *Nat. hom.* 105–6 and Alexander ch. 13 confirm indirectly the connection between the quoted Alexander passage in *Fat.* 179.12–17 about the cylinder with ch. 13 and related passages.

stones occur several times in texts from later antiquity,<sup>80</sup> but (later) Stoic use of cylinders as examples is confined to these two testimonies.<sup>81</sup>

However, PHILOPATOR's use of the cylinder is noticeably different from Chrysippus' as reported in Cicero and Gellius. In Cicero and Gellius we have an explanatory analogy, which uses the rolling cylinder as an externally observable event to illustrate what happens on the non-observable level *inside the human mind*. This implies that nothing was meant to be conveyed about the cylinder, it being only a means to explain certain psychological processes. Moreover, cylinder and cone stood for two distinct individual human beings. By contrast, in PHILOPATOR it looks as if the cylinder has become *part* of the hierarchy of beings; it is no longer used only in order to explain something else. This does not of course rule out that PHILOPATOR originally took the cylinder, as an example, from Chrysippus. But if so, he put it to a different use.

The Alexander passage suggests that this time the point was that human beings are like cylinders (and like *all* other types of beings)—in that they all have their characteristic movements and in all cases of characteristic movement it is fate that works *through* the respective being or its nature.<sup>82</sup> The comparison is not between different events in the mind and movements of cylinder and cone; rather, cylinders and human beings, *qua* different types of entities and their respective—observable—natural movements (rolling, action), are juxtaposed. The point that is made now is 'metaphysical' rather than psychological. The subtleties of Chrysippus' analogy, it seems, are lost.

## 8.7 THE RISE AND FALL OF THE PROBLEM OF FREEDOM TO DO OTHERWISE AND CAUSAL DETERMINISM

PHILOPATOR's concept of that which depends on us is one-sided, causative, and compatible with causal determinism. His compatibilism does not differ much from that of Chrysippus, except, perhaps, in that he introduced a different specified causal principle, and produced a philosophical

<sup>80</sup> e.g. [Arist.] *Mund.* 6 398<sup>b</sup>27–9; Basil, *Hex.* ix. 2 189B–C; Gregory of Nyssa, *Serm. cat. magn.* 6.9. The context is not fate and that which depends on us.

<sup>81</sup> Sharples (1978, 253) suggests that 'It is only Alexander who introduces the example of the *cylinder* into the context of arguments like 'A' (i.e. the argument of *Fat.* ch. 13 and the Nemesius passage); he may have introduced the example, originally associated with a rather different argument, into a group of examples where it does not belong.' However, since Marcus, who is earlier than Alexander, presents the cylinder example as well and in the same philosophical context, we can assume that it was a Stoic who put the cylinder on a line with stones, fire, water, etc.

<sup>82</sup> Pace Long 1970, 263, Sharples 1978, 253.

definition of that which depends on us. But from this it does not follow that PHILOPATOR and his contemporary fellow Stoics were not aware of the problem of the compatibility of a concept of freedom to do otherwise with their determinism. There is evidence in Alexander's *On Fate* and *Mantissa* that such a problem was the subject of a debate in the second and third centuries, and that some later Stoics were familiar with it. This debate is perhaps the closest the ancients ever came to discussing a problem similar to modern problems of causal determinism and free will.<sup>83</sup>

In this section I trace the evidence for this controversy over causal determinism and freedom to do otherwise. In particular, I look at how a concept of freedom of decision arose, and in what way Stoic philosophy had a part in this process. The Stoic involvement turns out to be twofold. On the one hand, it is the precise formulation of causal determinism by later Stoics like PHILOPATOR which seems to have smoothed the way for unambiguous accounts of (indeterminist) freedom to do otherwise by their critics. On the other hand, and in a more elusive and meandering manner, the Stoic concept of assent (*συγκατάθεσις*), in particular in the development it underwent in Epictetus' concept of *προαίρεσις*, seems to have been influential for the gradual development of a concept of freedom of decision, as held by opponents of the Stoics.

Concepts of freedom to do otherwise were developed in later antiquity in the guise of notions of that which depends on us, which were denoted by the phrase ἐφ' ἡμῶν.<sup>84</sup> The first philosophical *account or definition* of that which depends on us (ἐφ' ἡμῶν) which lends itself to an indeterminist interpretation can be found in Middle-Platonist texts. It was presumably developed in the context of the exegesis of Aristotle's works, by Aristotle scholars with Platonist or Peripatetic leanings, in the second century AD or before.<sup>85</sup> That which depends on us was classified as a subtype of the contingent (*ἐνδεχόμενον*), and the resulting concept was captured in the account of that which depends on us as:

<sup>83</sup> I have discussed the development of the problem of causal determinism and free will in considerably more detail in Bobzien 1998a. In the present section I focus on certain aspects of this development only. In particular, I leave out of consideration (i) the Aristotelian influence on the development of a concept of freedom to do otherwise, and (ii) questions about the notions of a faculty of the will, and of free *will*. For both topics the reader is referred to the above article.

<sup>84</sup> In this section I rely heavily on the distinctions I introduced above in section 6.3.5, in particular the distinctions of types of freedom, of conceptions of moral responsibility, and the various ways in which phrases like ἐφ' ἡμῶν can be understood.

<sup>85</sup> As I have shown in Bobzien 1998a, sections 5–8, this concept of that which depends on us seems to be the result of bringing together and systematizing three bits of Aristotelian doctrine: (i) the things depending on us, as those we deliberate about and which we choose, from the *Nicomachean Ethics*; (ii) the concept of two-sided possibility, or the contingent, and its relation to the capacities (*δυνάμεις*) of rational beings from *De Int.* 13; (iii) the problem of future contingents, and things that can equally happen and not happen, from *De Int.* 9.

that (part of the contingent) of which we are capable of <doing> it and also its opposite.<sup>86</sup> (Nem. *Nat. hom.* 104.4–7; 114.21–115.3)

This is clearly a definition of a two-sided, potestative concept of that which depends on us. It is uncertain whether the author of this account and later Middle-Platonist proponents of this concept of that which depends on us understood it as implying an indeterminist concept of freedom. For the account itself is ambiguous: the phrase ‘are capable of’ (δυνάμεθα) can refer equally to someone’s general capacity for doing opposites, and to someone’s ability to do one thing or its opposite, in a particular situation, without being causally determined to do one thing or the other.<sup>87</sup>

But there is some evidence that suggests that both some later Stoics and Alexander knew the account of that which depends on us as reported in Nemesius and that they understood it as implying indeterminism. Moreover, it seems that this ‘Middle-Platonist’ account was a precursor of Alexander’s own concept. If we trust Alexander’s own words, in his *On Fate* ch. 26 (196.24–197.3) he presents one of a number of arguments of his opponents which were meant to criticize ‘that that which depends on us is such as the common conception of human beings believes it to be’. The main point of the argument is the claim that a two-sided ‘depending on us’ would preclude the possibility that virtues and vices depend on us, since at the time when we are virtuous we are not capable of acting viciously, and vice versa. The argument begins:

If, they say, those things depend on us of which we are capable of <doing> also the opposites . . .<sup>88</sup> (Alex. *Fat.* 196.24–5)

This is almost exactly the definition of that which depends on us as we find it in the Middle-Platonist texts. What shall we make of this? It seems to me that the most natural conjecture would run somewhat like this:

<sup>86</sup> ἐνδεχόμενον ὁ αὐτό τε δυνάμεθα καὶ τὸ ἀντικείμενον αὐτῷ. The author of this account defines the contingent (ἐνδεχόμενον) as ‘the possible the opposite of which is possible, too. (δυνατὸν οὐ καὶ τὸ ἀντικείμενον δυνατὸν [Plut.] *Fat.* 571b, cf. Nem. *Nat. hom.* 103.20–1). He distinguishes three types of the contingent; that ‘for the most part’, that ‘for the least part’, and that ‘in equal parts’ (Nem. *Nat. hom.* 104.1–7, [Plut.] *Fat.* 571c). The ‘in equal parts’ is then identified with that which depends on us (Nem. *Nat. hom.* 114.21–2, [Plut.] *Fat.* 571d).

<sup>87</sup> In Bobzien 1998a, sections 7 and 8, I have given some reasons why it may have been understood as indeterminist, or at least as un-predeterminist. The earliest clearly two-sided concept of that which depends on us in the context of the fate debate that I have found so far is Joseph. *Ant.* 13.172 (οἱ μὲν οὖν Φαρισαῖοι τινὰ καὶ οὐ πάντα τῆς εἰμαρμένης ἔργον εἶναι λέγουσιν, τινὰ δ’ ἐφ’ ἑαυτοῖς ὑπάρχειν συμβαίνειν τε καὶ μὴ γίνεσθαι). The context does not provide sufficient information for us to decide whether the concept was indeterminist, or un-predeterminist, or whether it concerned only the absence of external determination or of force.

<sup>88</sup> Εἰ, φασίν, ταῦτά ἐστιν ἐφ’ ἡμῖν, ὧν καὶ τὰ ἀντικείμενα δυνάμεθα . . .

These critics of the 'Middle-Platonist' two-sided concept of what depends on us were most probably the Stoics Alexander criticizes most in his treatise, i.e. orthodox Stoics of the second century, belonging to the tradition of PHILOPATOR. We know that the Stoic doctrine of fate had been the subject of criticism by the Middle-Platonists in their treatise(s) on fate.<sup>89</sup> These Middle-Platonist critics, as we have seen, had themselves adopted a two-sided, potestative concept of that which depends on us—although this was not the only one they had (see below). So it is likely that some second-century Stoics in turn criticized this two-sided concept; and that this is what we find in the Alexander passage. We can, however, not rule out completely that Alexander's opponents in this chapter are not Stoics but 'dissident' Peripatetics.<sup>90</sup>

If the argument Alexander presents *is* Stoic, we can infer that the concept of that which depends on us ( $\epsilon\phi' \eta\mu\hat{\iota}\nu$ ) was understood at least as un-predeterminist, if not indeterminist. For only then is it incompatible with the Stoic theory of fate, and would give the Stoics reasonable grounds to reject it. In that case there would be evidence that before Alexander an un-predeterminist two-sided concept of what depends on us was discussed among Middle-Platonists (or Peripatetics) and Stoics. If the argument was part of a dispute internal to the Peripatetic school, the criticism of the two-sided, potestative  $\epsilon\phi' \eta\mu\hat{\iota}\nu$  need not have had anything to do with the question of determinism. It could merely have been a way of pointing out that the definition does not harmonize with Aristotle's own claim that virtues and vices depend on us (cf. Arist. *EN* III 5). Either way, the issue behind the argument is which is the right concept of that which depends on us<sup>91</sup>—a question that was, as far as I can see, not discussed in Chrysippus' time.

For unambiguous evidence for (i) an indeterminist concept of that which depends on us (and of indeterminist freedom), and for (ii) a debate over the incompatibility of freedom to do otherwise and Stoic *causal* determinism we have to turn to the Peripatetic views presented and defended by Alexander himself. In Alexander we encounter many slightly differing versions of the type of account of that which depends on us which he adheres to. This type looks like a descendant of the account used by the Middle-Platonists. The versions of it (almost) all have in common that they include a power over doing or choosing opposites (cf. e.g. *Fat.* 169.13–15, 181.12–14, 199.8–9, 211.31–3, *Mant.* 172.30–1). Here are two typical examples:

<sup>89</sup> [Plut.] *Fat.* 574e–f, *Calc. Tim.* 160–1.

<sup>90</sup> It is unlikely that the authors of the argument had criticized Alexander's view. For the definition of that which depends on us which they criticized is not one of those Alexander uses otherwise in the *On Fate*, cf. below and Bobzien 1998a section 9, in particular n. 44.

<sup>91</sup> This is also suggested by Alex. *Fat.* 185.7–11, quoted below.



If those things depend on us over which we seem to have control both of their being done and of their not being done . . .<sup>92</sup> (*Fat.* 169.13–15, trans. Sharples)  
 . . . ‘depending on us’ is predicated of the things over which we have in us the power of also choosing the opposite.<sup>93</sup> (*Fat.* 181.5–6; cf. 181.12–14)

The similarity to the Middle-Platonist account should be evident. But in these accounts phrases of the kind ‘having the power to do/choose opposites’ are still ambiguous between indeterminist readings, un-pre-determinist readings, and those compatible with determinism. In this context Alexander’s encounter with PHILOPATOR’s theory of fate becomes crucial: It is only where the two-sided, potestative ἐφ’ ἡμῶν meets with PHILOPATOR’s Causal Principle (cf. 8.2) that the phrases are disambiguated, and that a concept of freedom to do otherwise is uncontroversially in play. Thus we find an explanation of this power of choosing the opposite in Alexander, which seems to make use of this principle by negating it:

For we assume that we have this power in our actions of choosing the opposite and not everything that we choose has pre-determining causes, because of which it is not possible for us not to choose this.<sup>94</sup> (*Fat.* 180.25–8, cf. *Mant.* 171.22–7)

The connection with a version of PHILOPATOR’s Causal Principle is directly drawn in *Mant.* 174.3–12, and the principle rejected:

To say that, when all the external circumstances are similar, either (i) someone will choose, or even do, the same things or (ii) something will be without a cause . . . this is not sound. For neither is it necessary for a man always to choose the same things when all the circumstances are the same, nor is the action without a cause, if it does not come about in the same way. For the deliberation and the choice and the decision and the man are the cause of action of this sort, [and the man], having in himself the power of deliberating about the circumstances, has also the ability not to make the same choice from the same things.<sup>95</sup> (*Alex. Mant.* 174.3–12, trans. Sharples)

<sup>92</sup> Ἐφ’ ἡμῶν δὲ ταῦτα ὧν καὶ τοῦ πραχθῆναι καὶ τοῦ μὴ πραχθῆναι ἡμεῖς εἶναι δοκοῦμεν κύριοι . . .

<sup>93</sup> . . . τὸ ἐφ’ ἡμῶν ἐπὶ τούτων κατηγορεῖται ὧν ἐν ἡμῶν ἡ ἐξουσία τοῦ ἐλέσθαι καὶ τὰ ἀντικείμενα.

<sup>94</sup> Ὅτι γὰρ ταύτην ἔχουν τὴν ἐξουσίαν ἐν τοῖς πρακτοῖς προειλήφαμεν, ὥς δύνασθαι διαιρεῖσθαι τὸ ἀντικείμενον, καὶ μὴ πᾶν ὁ αἰρούμενος ἔχειν προκαταβεβλημένας αἰτίας, δι’ αἷς οὐχ οἷον τε ἡμᾶς μὴ τοῦτο αἰρεῖσθαι.

<sup>95</sup> τὸ γὰρ λέγειν πάντων τῶν ἐκτὸς περιεστώτων ὁμοίων ἢ ταῦτα αἰρήσεσθαι τινα, ἢ καὶ πράξειν, ἢ δὴ ἀναίτιως ἔσεσθαι τι, τούτων δὲ τὸ μὲν ἀναίτιως τι γίνεσθαι ἀδύνατον εἶναι, τὸ δὲ ταῦτα αἰρεῖσθαι τῶν αὐτῶν περιεστώτων δεικτικὸν εἶναι τοῦ τὰ ἐκτὸς αἰτία κύρια τῶν ὑφ’ ἡμῶν πραττομένων εἶναι, οὐχ ὕγιες. οὔτε γὰρ ἀνάγκη τὰ αὐτὰ αἰρεῖσθαι τὸν ἄνθρωπον ἀεὶ τῶν αὐτῶν περιεστώτων ἀπάντων, οὔτε ἀναίτιος ἢ πρᾶξις, εἰ μὴ κατὰ τὰ αὐτὰ γίνωιτο. ἢ γὰρ βουλὴ καὶ ἡ προαίρεσις καὶ ἡ κρίσις καὶ ὁ ἄνθρωπος τῆς τοιαύτης πράξεως αἴτιος, ἔχων ἐν αὐτῷ τὴν ἐξουσίαν τοῦ βουλευέσθαι περὶ τῶν περιεστώτων, ἔχει καὶ τὸ δύνασθαι ἐκ τῶν αὐτῶν μὴ τὰ αὐτὰ αἰρεῖσθαι.

Some Stoics, it seems, drew the same connection between PHILOPATOR's Causal Principle and the two-sided concept or that which depends on us, and consequently rejected the Peripatetic, two-sided concept. (This passage is embedded in a critical response by Alexander.)

But to rely on the point that, if in the same circumstances someone acts now in this way, now in another, an uncaused motion is introduced, and to state that because of this nobody is able to do the opposite of what they will do . . .<sup>96</sup> (*Fat.* 185.7–11)

Generally, wherever Alexander considers the possibility that the same person in the same circumstances acts or chooses otherwise than they do, phrases like 'having the power to do / choose opposites' seem to acquire either an indeterminist or an un-predeterminist meaning. Note that in both Peripatetic passages the contrast is not between human choices and actions being caused or uncaused, but between them having pre-determining causes (Stoic), or causes that are not pre-determining, i.e. ourselves (Peripatetics). Whether the freedom at issue was indeterminist or un-predeterminist (as defined in 6.3.5) is thus still open.

But there are a few passages that make it clear that the preceding causes of which the choice is independent according to Alexander include not only the external circumstances, but also the disposition of the agent's soul or the agent's character (*Fat.* 199.27–200.7; *Mant.* ch. 22 172.8–12, ch. 23 175.25–32). Alexander stresses that there are situations in which people can act or choose against their dispositions or character. This implies that he distinguished between a person that chooses, and that person's character or set of dispositions (like Cicero in *Fat.* 10–11, cf. 6.3.6). And this suggests that Alexander had an indeterminist concept of freedom to do otherwise.<sup>97</sup>

Taken together, our texts hence suggest that Alexander has indeed developed or explicated the (Middle-Platonist or Peripatetic) two-sided concept of that which depends on us in such a way that the position is indeterminist and libertarian. And that at this point in ancient philosophy we may have for the first time evidence of an awareness of the problem of indeterminist freedom to do otherwise and causal determinism. This awareness seems to have been shared by some later Stoic and some Peripatetic philosophers.

So far I have neglected the two additional elements that occur in Alexander's own standard accounts of that which depends on us, and

<sup>96</sup> τὸ δ' ἐποχουμένους τῷ "εἰ δὴ τῶν αὐτῶν περιστάσεων ὅτε μὲν οὕτως ὅτε δὲ ἄλλως ἐνεργήσῃ τις, ἀναίτιον κίνησιν εἰσάγεσθαι" διὰ τοῦτο λέγειν μὴ δύνασθαι οὐδὲ πράξει τις πράξει τὸ ἀντικείμενον . . . The close similarity to *Fat.* 192.22–4 suggests Stoic authorship of this passage.

<sup>97</sup> Some further textual evidence for this point is adduced below.

which were absent in the 'Middle-Platonist' account which we found in Nemesius (*Nat. hom.* 104.4–7, 114.21–115.3) and in Alex. *Fat.* 196.24–5. These features indicate the development from unspecified freedom to do otherwise (F1) to freedom of decision (F2). Take again Alexander's account

'depending on us' is predicated of the things over which we have in us the power of also choosing the opposite. (*Fat.* 181.5)

Thus, the two new features are: (i) the element of choosing or not choosing (ἐλέσθαι) to perform an action, instead of simply acting and not acting; (ii) the introduction of a power (ἐξουσία) which the individual on whom something depends possesses. Both features are significant in that they reflect important developments of the understanding of moral responsibility and its relation to freedom in later antiquity; furthermore, both these features seem to go back at least in part to Stoic influences. Thus we have the paradoxical situation that the position which Alexander's Peripatetics developed in demarcation from Stoic causal determinism and their one-sided concept of what depends on us, at the same time absorbed and made use of elements of Stoic philosophy of mind, which, as we shall see, are essential for the development of a concept of free decision. I take the two new elements in turn.

The first important innovation, which we witness not only in Alexander but also in some later authors, is that from action to choice. In Alexander's accounts it manifests itself in the change from 'the power of *doing* opposites' to 'the power of *choosing* opposites'.<sup>98</sup> We find variations of the formulation with 'to choose' (usually αἰρεῖσθαι) many times over in his *On Fate*.<sup>99</sup> There were three main philosophical theories concerned with human choice available to second- and third-century philosophers, all of which may have contributed to this change; one derives from Aristotle, another from Epictetus, a third from Plato. I suspect that a combination of them is responsible for the introduction of 'choice' into the accounts of what depends on us. None of the three positions was originally concerned with freedom of decision or any kind of indeterminist freedom.

First, Aristotle's concept of deliberate choice (προαίρεσις) had been adapted from his ethics into the debate over fate and that which depends on us by the early commentators,<sup>100</sup> in [Plut.] *On Fate* (571d), and by

<sup>98</sup> Similar accounts are preserved in Ammonius (*Int.* 130.30–2), in Boethius (*Int.* II 203), in the later paraphrase of *EN* (book III), [Heliodorus] *Paraphr.* 52.25–7, and in Nem. *Nat. hom.* 115.22–7, a passage whose origin I assume to be later than Alexander's *On Fate*. A comparable explanation is preserved in Calc. *Tim.* 151.

<sup>99</sup> e.g. *Fat.* 180.26–8, 181.5–6, 13–14, 184.18–19. We also find similar formulations in *Mant.* 171.22–4, 172.10–12, 174.9–12, 175.23–5.

<sup>100</sup> Aspasius, *In Eth. Nicom.* 71.25–7; 74.10–15; Anon. *In Eth. Nicom.* 150.1–4.

Alexander (in *Fat.* ch. 12, *Mant.* ch. 22). For Aristotle, deliberate choice is what distinguishes human, rational agency from animal action. Its characteristic feature is that it is a certain appetitive state of the soul which results from deliberation about possible courses of action. Whether we deliberate well, and what the outcome of our deliberation is, depends on our character or settled dispositions. There is no evidence that Aristotle maintained that the same agent in the same circumstances could come up with a different choice (*προαίρεσις*). Moral responsibility is grounded on the fact that the agents are the beginning (*ἀρχή*) of their actions—and indirectly of their dispositions (MR1).

Second, Epictetus, spelling out parts of early Stoic philosophy, restricts that which depends on us to certain 'mental events' or movements of the soul. Only the use of our impressions, that is, primarily giving assent to them or withholding it, depends on us, since these are the only things not subordinate to external force or hindrances (cf. 7.1). Assenting to impulsive impressions, i.e. impressions of something as desirable or to be avoided, *is* choosing a course of action. The realization of what we have chosen to do does not depend on us, insofar as it is always possible that it is thwarted by external hindrances. The stress in Epictetus is on the points that it is ourselves who choose, and that we are not necessitated (*κατηναγκάσθαι*) in our choices. To what impressions we give assent depends on our dispositions (*προαίρεσις*, *προαιρετική δύναμις*, see below). The question of whether the same person in the same circumstances could choose otherwise is not addressed. In harmony with the orthodox Stoic view, Epictetus' answer would presumably have been 'no' (cf. 7.1). If a person wants to act in a different manner than they do, they have to change their disposition or *προαίρεσις*, i.e. that factor on the basis of which they make individual choices (just as in early Stoic philosophy, cf. 6.3.6). Epictetus emphasizes that moral accountability is—primarily—connected with the use of our impressions rather than with our actions (e.g. *Diss.* I 12.34, cf. above 7.1). We are morally responsible because it is in our assenting and choosing that our character and dispositions are reflected (MR1). The influence of Epictetus on philosophers and intellectuals in later antiquity was immense, and at the beginning of the third century various elements of his philosophy had been absorbed into the general philosophical discussion, including Christian and Platonist thought (7.3.3.2, end).

Third, Plato may have provided a further motive for the change from action to choice. The Middle-Platonist philosophers arranged their doctrine of fate around a number of passages from Plato. One of them comes from the Myth of Er in book 10 of Plato's *Republic*. There the souls, before they are born again, have to *choose* a life, and in that context they are told that the consequences of their choice, whether good or bad, will be their

responsibility, and that they cannot blame god (αἰτία ἐλομένου θεὸς ἀναίτιος, *Rep.* 617e). For Plato, in this passage, the question was not one of freedom of decision. His concern was that the human soul *and not someone else*—in particular not god—is responsible for the choice (MR1). From the second century onwards, mainly in Platonist texts, the above quote from Plato occurs so regularly that we can infer that it, and with it parts of the Myth of Er, were a central element of the Platonist theory of fate.<sup>101</sup>

In some texts that present the Middle-Platonist theory of hypothetical fate,<sup>102</sup> Plato's theory undergoes a significant development. In Alcinous (*Didasc.* ch. 26 179.8–13) Plato's formerly 'pre-natal' choice of a life is presented as including the choice of individual *actions* in one's life, and it has become depending on the soul whether or not to *act*. In Nemesius the term *προαίρεσις* has entered the interpretation of Plato's statement: now the individual choices (*προαιρέσεις*) and some of the actions in accordance with choice (*κατὰ προαίρεσιν*) depend on us (*Nat. hom.* 110.5–9; cf. 109). Neither text suggests that *προαίρεσις* or *αἰρεῖσθαι* refers to freedom of decision. Rather, the importance of the introduction of individual choices lies in the fact that it is in their choices that people manifest themselves *qua* rational or moral beings: My choices, since determined by nothing but myself, reflect *who I am*. This is why I am morally responsible for what I choose. It is in order to ensure this that choices have been exempted from the *predetermination* by fate (freedom of type F3, cf. 6.3.5). The Middle-Platonist interpretations of Plato with their focus on individual choices of actions are likely to reflect the general focus on choices and mental events which seems to have started at the time of Epictetus or a little earlier.<sup>103</sup>

Returning to Alexander, we can note two things: First, the introduction of choice into the account of that which depends on us seems to result from a combination of the three possible influence factors, Plato, Aristotle,

<sup>101</sup> Cf. e.g. Calc. *Tim.* 154, Hippol. *Ref.* 19.19 (*DD* 569.19–22), Nem. *Nat. hom.* 110.7–9, Max.Tyr. 41.5a, Justin, *Apol.* 44, Porphyry *ap.* Stob. *Ecl.* II 164; see also Tacitus, *Ann.* 6.22.

<sup>102</sup> This theory, the earliest traces of which are preserved in Tacitus, *Ann.* 6.22, and Plut. *Quaest. Conv.* 740c, maintains that certain human activities are not fated, but caused by the person, whereas the consequences of these activities are fated. Cf. e.g. den Boeft 1970, 28–34.

<sup>103</sup> On the one hand, from the 2nd cent. onwards sources that discuss determinism seem generally to concentrate more on mental activities like thinking, deliberating, assenting, and choosing. For instance, the Chaldaeans listed such mental states and events among the things they claimed were predetermined by the stars (e.g. Gell. *NA* 14.1.23, cf. Nem. *Nat. hom.* 104.18–21). These explicit mentions of the predetermination of the motions of the soul may have triggered their explicit exemption from external causal predetermination or force on the side of the 'libertarians'. On the other hand, there is the importance of the problem of choice (*προαίρεσις*) of good and evil in early Christian theory, Platonism, and Gnosticism, in particular in the context of the question of the origin of evil.

and Epictetus. Second, the motivation for adding choice into the account appears not to have been the attempt to express freedom of decision.

Alexander knows and uses both a concept of *προαίρεσις* of the Epictetan / Platonic type, as moral choice (*Fat.* 169.12), and the Aristotelian one of deliberate choice (in the majority of places, e.g. *Fat.* 180, 194–5, 212). How exactly Alexander thought these concepts of choice linked up with ‘to choose’ in his account ‘power to choose opposites’ is uncertain.<sup>104</sup> Mostly the expressions appear to be understood as non-moral and as the result of deliberation, i.e. in the Aristotelian sense. However, there seems to have also been a distinctly non-Aristotelian element involved. In Alexander, the accounts containing the verb ‘to choose’ (*αἰρεῖσθαι*) are apparently not regarded as a substitute for those containing the verb ‘to act’ (*πράττειν*), but rather as a supplement. Not only do we find both kinds of accounts several times, we also regularly find choosing and acting co-ordinated in one phrase or account.<sup>105</sup> We find the same juxtaposition in Nemesius (*Nat. hom.* 115.22–28; 116.3–5) and in Ammonius (*Int.* 130.30–32). These latter authors provide a reason why action as well as choice are considered: action presupposes choice, and praise and blame concern both action and choice: both are culpable (*Nem. Nat. hom.* 115.27–8, *Amm. Int.* 130.32–3); moreover, sometimes we are prevented from realizing our choices (*Nem. Nat. hom.* 116.3–5). This suggests that the switch from action to choice, or rather the addition of choice to action, was motivated by a change of focus regarding what is of primary moral relevance: choices rather than actions. Here Stoic, and in particular Epictetan, thought appears to have been influential, possibly via the Middle-Platonist re-interpretation of Plato’s Myth of Er. This may be the most promising conjecture of why in Alexander the account of ἐφ’ ἡμῖν so frequently includes the term ‘choice’. Alexander states, for instance, in a similar vein, ‘the assessment of morally right action is made not only from the things that are done, but much rather from the disposition and capacity from which it is done’ (*Alex. Fat.* 206.16–18). Thus it seems that the *origin* of the term ‘to choose’ in the account of ἐφ’ ἡμῖν is non-Peripatetic, although Alexander then generally interprets it in the Aristotelian sense, as choice that is the result of deliberation.

The initial grounds for the inclusion of choice in the accounts of what depends on us in Alexander and later authors are then unlikely to have been the quest for an indeterminist concept of freedom of decision (as opposed to freedom of action), or the question of whether people are causally undetermined in their choices between alternatives. Rather it is

<sup>104</sup> The terms in the accounts are αἶρεσις/αἰρεῖσθαι, not προαίρεσις/προαιρεῖσθαι, but Alexander also uses αἰρεῖσθαι to refer to Aristotle’s deliberate choice (*Fat.* ch. 11).

<sup>105</sup> *Fat.* 181.14 ἐξουσίαν . . . τῆς αἰρέσεως τε καὶ πράξεως τῶν ἀντικειμένων; cf. *Fat.* 179.3, 11, 189.10–11; *Mant.* 174.4, 175.24–5, 180.28–31.

the recognition of choice as the specific activity through which human rational beings can have an influence in the world, and accordingly, to which moral appraisal is to be attached. (This is much the same point as Chrysippus made in his time, cf. 6.3.6.) The issue is autonomy rather than freedom to do otherwise.

On the other hand, the second change in Alexander's account—from 'being capable (*δύνασθαι*) of doing and not doing something' to 'having the power or authority (*ἐξουσία*) over doing and not doing something'—appears to be pertinent to the development of a concept of freedom of decision. Formulations of the account with *ἐξουσία* occur as standard in Alexander's *On Fate*<sup>106</sup> and in *Mantissa* ch. 23, and there can thus be little doubt that the use is philosophically motivated. Alexander seems to be the first—of whom we know—to use the term *ἐξουσία* in this kind of account of what depends on us; it is also found in several later authors.<sup>107</sup> How can we explain the appearance of *ἐξουσία* in the accounts? On this question, I can only offer conjecture.

First, since the term *ἐξουσία* seems to have replaced the verb *δύνασθαι* in the account, which may have had its origin in Aristotle's two-sided capacity (*δύναμις*) of rational beings from *Int.* 13 and *Met.* Θ, *ἐξουσία* may have been meant to stand in for this rational capacity.<sup>108</sup> Second, in Alexander *ἐξουσία τῆς αἰρέσεως* / *ἐξουσία τοῦ αἰρεῖσθαι* could take the place filled in other late second- and third-century authors by the phrase *προαιρετική δύναμις*.<sup>109</sup> This phrase in turn seems to be a descendant of *προαίρεσις* in the Epictetan sense that Epictetus himself already used in place of *προαίρεσις* throughout in *Diss.* 2.23. (But it also experiences an Aristotelian interpretation, cf. e.g. *Nem. Nat. hom.* 119.11.) For Epictetus, *προαίρεσις* does not refer to a person's particular choice in a certain situation. First and foremost he uses the term to denote a disposition of the human mind which determines a person's individual choices. The exertion of this disposition is the only thing that is never necessitated by external circumstances. What we choose thus depends on us. If this is where *ἐξουσία* in the accounts comes from, it may refer to a specifically human disposition for making choices. Third, Alexander uses 'we have (in us) the power over . . .' (*ἐξουσίαν (ἐν ἡμῖν) ἔχομεν τοῦ . . .*) as virtually synonymous with 'we are in control over . . .' (*ἡμεῖς κύριοι τοῦ . . .*). The latter formulation occurs about a dozen times in this

<sup>106</sup> There are 33 instances according to Thillet's index.

<sup>107</sup> It further occurs in *Quaestio* III 13 of the *Quaestiones* ascribed to Alexander; in *Nemesius* (*Nat. hom.* 112.10, 115.25) in a passage I believe to be later than his reports from the Middle-Platonist theory of fate, in *Ammonius* (*Int.* 148.14, 23); and in slightly different wordings in *Iamblichus* (*Stob. Ecl.* II 173.21) and *Simplicius* (e.g. *Ench.* 98a).

<sup>108</sup> See Bobzien 1998a, section 6.

<sup>109</sup> *Clement, Strom.* 6.135.4 (500.20–1 Stählin), cf. *Nem. Nat. hom.* 119.4–5, 11.

context. This fact may provide another link to Aristotle's *Ethics* (see Alex. *Fat.* 178.26–8, 180.9–12), but formulations with κύριοι for ἐφ' ἡμῶν are standard in practically all schools. There could also be a link between Alexander's use of 'to have the power' (ἐξουσίαν) and Epictetus, who uses it to say whether we or some external influences have control over certain things (7.1). Fourth, the Middle-Platonist Maximus of Tyre uses ἐξουσία twice in his 41st speech, in the context of explaining of how vice entered the world: it is this power of the soul (ἐξουσία τῆς ψυχῆς) which enables us to do bad things (*Orat.* 41.5a and g).

More important than where exactly the use of the term ἐξουσία originates is the particular way in which the various influences are combined. It is the synonymy with 'to be in control over' (κύριος) which best shows the significance of the replacement of 'to be capable of' (δύνασθαι) by 'to have the power' (ἐξουσία). The phrase ἔχειν τὴν ἐξουσίαν τοῦ πράττειν (αἰρεῖσθαι) καὶ μὴ πράττειν (αἰρεῖσθαι) can be understood in two different ways. Compare the sentences

- (i) 'the king has the power (authority, control) over living and dying (life and death)'
- (ii) 'the king has the power (ability, capacity) to live and to die'.

Similarly, the above sentence can be understood as

- (i) 'we have the power (authority, control) over acting/choosing and not acting/choosing'
- (ii) 'we have the power (two-sided ability, capacity) to act/choose and not to act/choose'.

In the cases of type (i), with *genitivus obiectivus*, where someone has the power, authority, or control over certain things, we can separate the person who has the power from the things over which they have the power in a way that cannot be done in cases of type (ii). The king's power over living and dying can be concerned with *other people's* lives. The king's power to live and die is concerned with *his own* condition. In case (i), the agent becomes a 'decision-maker' (cf. 6.3.5), in case (ii) this is not so. The synonymy of 'having the power (ἐξουσία)' and 'being in control (κύριος)' over something in Alexander suggests that we have case (i) in his accounts of what depends on us. Something depends on us if we are in control over doing/choosing and not doing/choosing it. This is noticeably different from the earlier formulation with 'to be capable of' (δύνασθαι): there clearly a two-sided *capacity* was at issue.

But owing to the introduction of 'doing/choosing something *or its opposite*', κύριος and ἐξουσία do not function in the same way any more as they did in Aristotle and Epictetus: In the latter authors it was the fact that nothing hindered us from doing or choosing something that made



us have control over them. In Alexander's account, the terms are (at least at times)<sup>110</sup> understood differently: what makes us have control over things is the fact that we are causally undetermined in our decision and thus can freely decide between doing/choosing or not doing/choosing them. The element of free decision in Alexander's account thus lies not in the addition of the phrase 'choosing or not choosing', but in the introduction of the term *ἐξουσία*. We can thus see that the change to *ἐξουσία* in the account may have been of great significance, since it provided a way to express that the agent is a causally undetermined decision-maker (cf. also 6.3.5).<sup>111</sup>

Thus it seems that in Alexander's accounts of what depends on us it was rather the expression 'power' (*ἐξουσία*) than 'to choose' (*αἰρεῖσθαι*) that served to express the element of freedom of decision. We saw above that Alexander clearly had a concept of freedom to do otherwise. We have now seen how this concept developed, absorbing both Stoic and Aristotelian and perhaps Platonic elements on its way; and that it is a concept of freedom of decision, based on choice in addition to action, and a mental power.<sup>112</sup> However, we would be quite wrong to assume that at the turn of the second century a general awareness of the problem of causal determinism and freedom to do otherwise had arisen, and that it had become part of the philosophical standard repertory of the time. There are several points that suggest that at his time Alexander is almost an isolated case, and that concepts of freedom to do otherwise are a rather marginal phenomenon without a clear philosophical context.

<sup>110</sup> See below. Note that the phrase *ἐξουσία τοῦ πράττειν καὶ μὴ πράττειν* itself can also be understood as 'not being hindered either way by external or internal factors'; and also as 'having a general two-sided capacity to act'. In neither case would freedom of decision need to be involved.

<sup>111</sup> It may also be worth considering in this context again the relation between the expressions *ἐξουσία* and *ἀντεξούσιον*. We observed a link between them, although in a deterministic setting, already in Epictetus (cf. *Diss.* 1.25.2, 4.1.62, 4.1.68, 4.7.16, 4.12.8; see above 7.2.4). Alexander uses *ἀντεξούσιον* very rarely, but in one place he states that *ἀντεξούσιον* is what is actually meant by *ἐφ' ἡμῖν* and that his opponents miss this meaning of the term (*Fat.* 182.22–4, cf. *Fat.* 189.9–11). Thus something could have been considered as in someone's own power (*ἀντεξούσιον*), and as truly depending on (*ἐπὶ*) that person, precisely if that person has the *ἐξουσία* over doing/choosing it or its opposite. *Ἀντεξούσιον* may then have been understood by some as implying indeterminist freedom of the agent.

<sup>112</sup> There is no response by the Stoics to the Peripatetic theory of that which depends on us as advanced by Alexander. But we can infer from what we have, how they did or would have responded:

- Based on the universal rationality of the mind, the separation of person and character would have been rejected.
- The Stoics seem to have argued that a two-sided indeterminist concept makes moral responsibility impossible (see above), and this holds of all of Alexander's accounts equally.
- Our choosing, and generally mental events are just as fated as everything else. (For this point there is some evidence in Nemesius and Plot. *Enn.* III 1.2 236.17–24).

But no further live discussion of this issue is reported.

First, it is noteworthy that the one-sided, causative conception of what depends on us was by no means peculiar to the Stoic system, nor generally seen as a feeble attempt of the Stoics to nominally save moral responsibility—even if Alexander wants to make us believe this (*Fat.* ch. 13). On the contrary, it seems to have been regarded as a serious alternative or as a complement to the two-sided, potestative conception in second- and third-century Middle-Platonist and Peripatetic writings. We find non-Stoic accounts of such concepts in [Plut.] *On Fate*, in the *Mantissa*, and in Nemesius.<sup>113</sup> Had the general concern at the time been to preserve freedom to do otherwise as a prerequisite for moral accountability, this repeated approbation of a one-sided, causative concept of depending on us would be decidedly odd. On the other hand, if we assume that the two-sided, potestative concept was considered to express a two-sided general capacity which provides the vehicle through which rational or moral agents manifest themselves in their actions, this fact is far less startling. For in that case both the one-sided concepts and the two-sided one serve to ensure that the agent is causally—and hence morally—responsible for the action, if in slightly different ways.

Second, the unfamiliarity of second- or early third-century thinkers with an indeterminist concept of freedom to do otherwise is also beautifully illustrated by the awkward way in which it is handled in ch. 22 of the *Mantissa*, which seems to present a presumably Peripatetic alternative to Alexander's position. Its charming solution to the problem of Stoic-fashion determinism lies in the introduction of 'that which is not' (τὸ μὴ ὄν) as an influence factor, which guarantees that our choices depend on us in the 'proper' sense.<sup>114</sup>

A third point that shows that a concept of freedom to do otherwise was far from being securely established is that not only is there no unambiguous evidence for it before Alexander, but also in Alexander's *On Fate* and in the *Mantissa* there is a steady vacillation between various concepts of what depends on us, some advocating freedom to do otherwise, others implying only the absence of any *predetermination* by external and/or internal causal factors, and still others that are clearly compatible with determinism.<sup>115</sup>

In particular, indeterminist freedom is almost certainly at issue in the important passages in which Alexander depicts the fictitious situation of someone who acts against their character, or against what seems reasonable to them, in order to show that determinism is wrong (*Fat.* chs. 6 and 29, *Mant.* 174.33–5). Equally, the passage in which Alexander argues that

<sup>113</sup> [Plut.] *Fat.* 571e–f, *Nem. Nat. hom.* 114.15–16, cf. 102, *Mant.* ch. 22 172.7–9; for details and the presumably Aristotelian origin of these accounts see Bobzien 1998a, section 12.

<sup>114</sup> For details see Bobzien 1998a, section 12. Cf. also Sharples 1975b.

<sup>115</sup> This point has been discussed by Sharples (1975b).

our regret shows that we have the power to choose opposites suggests a concept of freedom to do otherwise. He says

For it is on the grounds that it was possible for us also not to have chosen and not to have done this that we feel regret and blame ourselves for our neglect of deliberation.<sup>116</sup> (*Fat.* 180.29–31, trans. Sharples)

Another important argument is that the same circumstances do not necessarily lead the same agent to the same actions/choices, because there are several—incommensurable—ends looking towards which we decide and choose (*Fat.* ch. 15, *Mant.* 174.17–24). All these arguments strike one as thoroughly modern, and as easy to grasp within a framework of today's discussions of the 'free-will problem'.

Contrasted with these are the many Alexander passages with arguments which, for someone who expects a defence of freedom to do otherwise, simply seem to beg the question. However, most of these arguments make perfect sense as soon as one understands them as concerned not with indeterminist freedom but with different philosophical questions. There are first those passages in which Alexander basically contents himself with paraphrasing Aristotle, for instance where he describes the agent as causally responsible, or as a beginning (*ἀρχή*) of action (*Fat.* chs. 15, 20; *Mant.* 173.10–21); similarly where he opens up the vexed questions of character determination and of one's responsibility for the formation of one's character (*Mant.* 175.9–32, *Fat.* ch. 27). Here Alexander does not go beyond Aristotle, leaving it open whether, when we *begin* forming our character, we are 'free' or our dispositions predetermined. Moreover, the whole question of one's responsibility for forming one's character makes most sense on the assumption that (at least in some situations) what one does *is* fully determined by what character one has. Finally, determinist reasoning, quite similar to Chrysippus' position (cf. *Cic. Fat.* 7–9, 41–3) can be found in *Mantissa* ch. 23 (174.35–9). It suggests that if at different times the same person chooses similar things, the reason is not that the circumstances are similar (and function hence as external necessitating causes), but because the person's dispositions are similar each time. These remarks may suffice as an illustration that Alexander is by no means clear and consistent about whether his phrases like 'having the power to do/choose opposites' are to be understood as indeterminist, although in some places he clearly did (see above).

Thus in Alexander's *On Fate* we have evidence of a Stoic–Peripatetic debate over the compatibility of universal causal determinism and freedom

<sup>116</sup> Ὡς γὰρ ἐνὸν ἡμῶν καὶ μὴ ᾗρησθαι καὶ μὴ πεπραχέναι τοῦτο μετανοοῦμέν τε καὶ μεμφόμεθα αὐτοῖς τῆς περὶ τὴν βουλήν ὀλιγωρίας.

Similarly, but not as clear, *Fat.* ch. 19 on pardon and blame, where Alexander plainly goes beyond Arist. *EN* III 1, and *Fat.* ch. 16.

to do otherwise. However, it is important to realize that neither the Stoics nor the Peripatetics experience *within* their systems *any* problem of determinism and freedom to do otherwise. The Stoics did not require a concept of freedom to do otherwise, since they did not connect moral responsibility with such freedom. As a consequence, they had no reason to concern themselves with any free-will problem. Theirs is the problem of the compatibility of autonomous agency and causal determinism. On the Peripatetic side, Alexander faced no free-will *problem* either. It is true, at least at times he regards a concept of freedom to do otherwise as a prerequisite for moral responsibility. But he secures such freedom by simply denying *predetermination* of human actions. Unlike Stoics and Platonists, he can do so, because he does not believe in universal divine providence. A problem of determinism and freedom to do otherwise thus arises only *in the confrontation of the two philosophical systems*, when later Stoic causal determinism meets late Peripatetic freedom to do otherwise—with such freedom understood as a necessary condition for moral responsibility.

If we want to find philosophers who are troubled by a free-will problem *within* their system, we need to turn to Platonists and Christian thinkers. In their theory of hypothetical fate the Middle Platonists had severed the Stoic chain of causes at the point of human choices and actions (see above n. 102). This was made possible by the fact that they proposed an immaterial human soul which can initiate action in the material world.<sup>117</sup> In this way they had gained un-predeterminist freedom, thus guaranteeing the agent's autonomy. However, as the Middle Platonists also advocated the universal impact of divine providence, the severance from the chain of causes did not solve all their difficulties. For human actions and choices, even if not the result of the network of causes, are still in accordance with divine providence. The problem of determinism is thus no longer that of predetermination by a network of corporeal causes, but of predetermination by god's providence, even if this does not work through the nexus of causes. In particular the problem became dominant, how to bring into agreement the evil choices and actions of human beings with god's providence, given that god is by definition good. Early Christian thinkers struggled with a similar question, despite considerable differences in their 'metaphysics'; and they, too, had the advantage of an immaterial soul which made it possible for human action to become independent of the network of material causes.

It is in this context that finally a faculty of the will is introduced (no doubt influenced again by Epictetus' concept of *προαίρεσις*, and, that is,

<sup>117</sup> Cf. e.g. Alcinous, *Didasc.* 153.4–5, ἡ δὲ πράξις ψυχῆς λογικῆς ἐνέργεια διὰ σώματος γνωμένη.

indirectly by the early Stoic concept of assent) to warrant the independence of human evil deeds from god's providence or creation. In which way this will was considered as free varies and is often hard to determine: indeterminist freedom of decision, un-predeterminist freedom, and freedom from force or compulsion seem to alternate in our sources. Since the problem is no longer the independence of preceding causes (this has simply been postulated), formulations of determinism of the kind 'same (corporeal) causes, same effects' are no longer fitting. As a consequence, an unambiguous description of the freedom involved in the various theories, whether indeterminist, un-predeterminist, or neither, becomes hard to find. Accordingly, it is seldom clear what kind of problem of 'freedom' of the will the philosophers were dealing with.

In conclusion, the problem of the compatibility of causal determinism and freedom to do otherwise appears to have been formulated only in the second century AD. This seems to have been the result of a confrontation of a refined Stoic universal causal determinism on the one hand, with a two-sided, potestative concept of what depends on us (is ἐφ' ἡμῶν), originating from Aristotle's ethics, on the other. Presumably some time in the second century, this concept was interpreted as implying freedom to do otherwise. Who exactly was responsible for this new indeterminist understanding of that which depends on us is uncertain, but it seems to have been adopted thereafter both by some Peripatetics and by some Middle Platonists. Alexander's accounts of that which depends on us display two further developments of this indeterminist concept of freedom. First, the addition of choice (αἵρεσις) to action in the accounts reflects a refinement of theory of action and moral responsibility, which focuses more on intra-psychic events, and in particular on the choices of good or bad, and the culpability of such choices. Here Stoic and Platonist impacts become apparent. Second, the replacement in the account of 'being capable of' by 'having the power or authority (ἐξουσία) over' introduces a decision-making faculty, and thus leads to a concept of free decision—the result probably of a fusion of Epictetan and Aristotelian elements. But Alexander stops short of a concept of free will.<sup>118</sup> The need for a free will becomes pressing in Platonist and Christian philosophy, in the context of the problems of how vice entered the world, and how god's providence and foreknowledge of the future is compatible with human responsibility. But this is no longer in the context of a physical theory of *universal causal* determinism, characterized by principles of the kind 'like causes, like effects'. Rather the determinism is now teleological only, and the context theological.

<sup>118</sup> This may be so in part because of his conception of the human soul, cf. Bobzien 1998a, section 12.

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